

WBS No: 1EFB01
Activity ID: 1EFB0005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

WBS No: 1EFB01		Title: 130 Cluster Landlord										
Activity ID: 1EFB0005		Description: 130 Cluster Landlord Functions, FY00						Cost Risk 2		Schedule Risk 1		
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	5.998	5.998	129.539	35.411	0	164.950	63.215	228.165
3	Preventive maintenance	1.00	each	HC	1.039	1.039	22.760	3.935	0	26.694	11.107	37.801
Total for Activity 1EFB0005:						7.037	152.299	39.346	0	191.645	74.322	265.966

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>Approximately 2079 corrective/routine maintenance work actions are expected.</p> <p>The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$174.73 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel Revised number of work orders - FY03-05 is 81.53% of FY99. Basis for adjustment - Directed targets.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	393.03	Hours
Factors	784.82 h	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target			
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	275.81	Hours
Factors	550.76 h	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target			
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	265.25	Hours
Factors	529.66 h	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target			
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	640.94	Hours
Factors	1279.88 h	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target			

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	574.71	Hours
Factors	1147.61	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	548.89	Hours
Factors	1096.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	44.21	Hours
Factors	88.28	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	265.25	Hours
Factors	529.66	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	221.04	Hours
Factors	441.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	265.25	Hours
Factors	529.66	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	453.10	Hours
Factors	904.77	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	176.83	Hours
Factors	353.11	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	143.64	Hours
Factors	286.83	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	913.76	Hours
Factors	1824.66	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	390.50	Hours
Factors	779.77	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	132.62	Hours
Factors	264.83	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.26	Hours
Factors	26.48	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.89	Hours
Factors	39.72	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	21.55	Hours
Factors	43.04	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.74	Hours
Factors	57.38	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	32.05	Hours
Factors	63.99	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	27.44	Hours
Factors	54.8	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	11.05	Hours
Factors	22.07	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.21	Hours
Factors	4.41	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	13.26	Hours
Factors	26.48	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.66	Hours
Factors	45.24	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.26	Hours
Factors	26.48	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.69	Hours
Factors	91.23	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.18	Hours
Factors	14.34	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.84	Hours
Factors	17.66	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	19.53	Hours
Factors	38.99	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	6.63	Hours
Factors	13.24	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	35.411.40	Dollars
Factors	69666.8	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 817 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$72.29 average

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Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	530.50	Hours
Factors	1059.33 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	397.87	Hours
Factors	794.5 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.71	Hours
Factors	121.22 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.53	Hours
Factors	52.97 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.89	Hours
Factors	39.72 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.03	Hours
Factors	6.06 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.934.60	Dollars
Factors	7740.75 d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target		

Activity ID: 1EFB0010 Description: 130 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	10.936	10.936	235.631	62.887	0	298.518	112.396	410.913
3	Preventive maintenance	1.00	each	HC	1.844	1.844	40.419	6.987	0	47.406	19.280	66.686
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	25.265	25.265	0	25.265
Total for Activity 1EFB0010:						12.781	276.050	69.874	25.265	371.189	131.676	502.865

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance

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Units - Work Packages
Unit Cost - \$174.73 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	706.58	Hours
Factors 794.5 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	471.05	Hours
Factors 529.66 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	765.48	Hours
Factors 860.73 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1,020.62	Hours
Factors 1147.61 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	974.76	Hours
Factors 1096.05 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1,138.25	Hours
Factors 1279.88 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	78.51	Hours
Factors 88.28 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	471.05	Hours
Factors 529.66 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	392.55	Hours
Factors 441.39 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	804.65	Hours
Factors 904.77 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	471.05	Hours
Factors 529.66 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	255.09	Hours
Factors 286.83 h		0.88934 ISYS 0614001.88934200 - Svstem						

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,622.75	Hours
Factors	1824.66							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	314.04	Hours
Factors	353.11							
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	693.48	Hours
Factors	779.77							
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	235.52	Hours
Factors	264.83							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.28	Hours
Factors	43.04							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32	Hours
Factors	39.72							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.91	Hours
Factors	63.99							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.74	Hours
Factors	54.8							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	51.03	Hours
Factors	57.38							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.63	Hours
Factors	22.07							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.92	Hours
Factors	4.41							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	40.23	Hours
Factors	45.24							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.13	Hours
Factors	91.23							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.75	Hours
Factors	14.34							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.71	Hours
Factors	17.66	h						
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	34.68	Hours
Factors	38.99	h						
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	11.77	Hours
Factors	13.24	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	62.886.96	Dollars
Factors	69666.8	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$72.29 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	942.11	Hours
Factors	1059.33	h						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58	Hours
Factors	794.5	h						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.81	Hours
Factors	121.22	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.11	Hours
Factors	52.97	h						
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB01
Activity ID: 1EFB0010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32	Hours
Factors	39.72	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39	Hours
Factors	6.06	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	6.987.44	Dollars
Factors	7740.75	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - Svsystem		

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15.222.25	Dollars
	Factors 15222.3 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.042.85	Dollars
	Factors 10042.9 Dollars								

Activity ID: 1EFB0015 Description: 130 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	10.936	10.936	235.631	62.887	0	298.518	83.178	381.695
3	Preventive maintenance	1.00	each	HC	1.844	1.844	40.419	6.987	0	47.406	14.268	61.674
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	66.097	66.097	0	66.097
Total for Activity 1EFB0015:						12.781	276.050	69.874	66.097	412.021	97.445	509.466

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$174.73 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB01
Activity ID: 1EFB0015

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	765.48	Hours
Factors	860.73							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58	Hours
Factors	794.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	471.05	Hours
Factors	529.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,138.25	Hours
Factors	1279.88							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,020.62	Hours
Factors	1147.61							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	974.76	Hours
Factors	1096.05							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	392.55	Hours
Factors	441.39							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	78.51	Hours
Factors	88.28							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	471.05	Hours
Factors	529.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	804.65	Hours
Factors	904.77							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	471.05	Hours
Factors	529.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	255.09	Hours
Factors	286.83							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	314.04	Hours
Factors	353.11							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,622.75	Hours
Factors	1824.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	693.48	Hours
Factors	779.77							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	235.52	Hours
Factors	264.83							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.28	Hours
Factors	43.04							
						0.88934	[SYS 061400]	.88934200 - System

WBS No: 1EFB01
Activity ID: 1EFB0015

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32	Hours
Factors	39.72							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.91	Hours
Factors	63.99							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.74	Hours
Factors	54.8							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	51.03	Hours
Factors	57.38							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.63	Hours
Factors	22.07							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.92	Hours
Factors	4.41							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	40.23	Hours
Factors	45.24							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.13	Hours
Factors	91.23							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.75	Hours
Factors	14.34							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.71	Hours
Factors	17.66							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	34.68	Hours
Factors	38.99							
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	11.77	Hours
Factors	13.24							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	62.886.96	Dollars
Factors	69666.8							
			1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

WBS No: 1EFB01
Activity ID: 1EFB0015

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	942.11	Hours

Factors 1059.33 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58	Hours
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Factors 794.5 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.81	Hours
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Factors 121.22 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.11	Hours
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Factors 52.97 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32	Hours
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Factors 39.72 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39	Hours
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Factors 6.06 h

0.88934 ISYS 0614001.88934200 - Svstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	6.987.44	Dollars
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Factors 7740.75 d 1.015 -- FY00 Escalation --

0.88934 ISYS 0614001.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	45.377.48	Dollars

Factors 45377.5 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	20.719.29	Dollars
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Factors 20719.3 Dollars

Activity ID: 1EFB0020 Description: 130 Cluster Landlord Functions, FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1EFB01
Activity ID: 1EFB0020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

1	Corrective maintenance	1.00	each	HC	10.936	10.936	235.631	62.887	0	298.518	81.528	380.046
3	Preventive maintenance	1.00	each	HC	1.844	1.844	40.419	6.987	0	47.406	13.985	61.391
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	122.081	122.081	0	122.081
Total for Activity 1EFB0020:						12.781	276.050	69.874	122.081	468.005	95.513	563.518

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$174.73 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58	Hours
Factors 794.5 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	765.48	Hours
Factors 860.73 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	471.05	Hours
Factors 529.66 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.020.62	Hours
Factors 1147.61 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	974.76	Hours
Factors 1096.05 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.138.25	Hours
Factors 1279.88 h								
0.88934 [SYS 061400] .88934200 - Ssystem								

WBS No: 1EFB01
Activity ID: 1EFB0020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	78.51	Hours
Factors	88.28							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	392.55	Hours
Factors	441.39							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	471.05	Hours
Factors	529.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	804.65	Hours
Factors	904.77							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	471.05	Hours
Factors	529.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	314.04	Hours
Factors	353.11							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,622.75	Hours
Factors	1824.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	255.09	Hours
Factors	286.83							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	693.48	Hours
Factors	779.77							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	235.52	Hours
Factors	264.83							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.28	Hours
Factors	43.04							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32	Hours
Factors	39.72							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.91	Hours
Factors	63.99							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.74	Hours
Factors	54.8							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	51.03	Hours
Factors	57.38							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.63	Hours
Factors	22.07							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB01
Activity ID: 1EFB0020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.92	Hours
Factors	4.41							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	40.23	Hours
Factors	45.24							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.55	Hours
Factors	26.48							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.13	Hours
Factors	91.23							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.75	Hours
Factors	14.34							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.71	Hours
Factors	17.66							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	34.68	Hours
Factors	38.99							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	11.77	Hours
Factors	13.24							
0.88934 [SYS 061400] .88934200 - System								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	62,886.96	Dollars
Factors	69666.8	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$72.29 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%

WBS No: 1EFB01
Activity ID: 1EFB0020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	942.11	Hours
Factors 1059.33 h								
						0.88934	[SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	706.58	Hours
Factors 794.5 h								
						0.88934	[SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.81	Hours
Factors 121.22 h								
						0.88934	[SYS 061400] .88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.11	Hours
Factors 52.97 h								
						0.88934	[SYS 061400] .88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.32	Hours
Factors 39.72 h								
						0.88934	[SYS 061400] .88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39	Hours
Factors 6.06 h								
						0.88934	[SYS 061400] .88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	6,987.44	Dollars
Factors 7740.75 d 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400] .88934200 - Svsstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	88,229.02	Dollars
Factors 88229.0 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	33,851.72	Dollars
Factors 33851.7 Dollars								

Activity ID: 1EFB0025 Description: 130 Cluster Landlord Functions, FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	8.575	8.575	184,724	49,802	0	234,526	52,092	286,619
3	Preventive maintenance	1.00	each	HC	1,475	1,475	32,344	5,508	0	37,852	9,121	46,973
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	47,542	47,542	0	47,542
Total for Activity 1EFB0025:						10.051	217,068	55,310	47,542	319,920	61,213	381,133

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages

WBS No: 1EFB01
Activity ID: 1EFB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Cost - \$174.73 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	564.73	Hours
Factors	635 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	611.87	Hours
Factors	688 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	377.08	Hours
Factors	424 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.93	Hours
Factors	100 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	779.95	Hours
Factors	877 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,467.41	Hours
Factors	1650 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	62.25	Hours
Factors	70 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	313.94	Hours
Factors	353 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	377.08	Hours
Factors	424 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	643.88	Hours
Factors	724 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	377.08	Hours
Factors	424 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	250.79	Hours
Factors	282 h							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB01
Activity ID: 1EFB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
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1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,298.44	Hours
Factors	1460							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	204.55	Hours
Factors	230							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	554.95	Hours
Factors	624							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	188.54	Hours
Factors	212							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	30.24	Hours
Factors	34							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors	32							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.79	Hours
Factors	20							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.36	Hours
Factors	51							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	41.80	Hours
Factors	47							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	40.55	Hours
Factors	45.6							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	15.12	Hours
Factors	17							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	18.50	Hours
Factors	20.8							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.2							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	32.02	Hours
Factors	36							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.50	Hours
Factors	20.8							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	64.03	Hours
Factors	72							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.78	Hours
Factors	11							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB01
Activity ID: 1EFB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	27.57	Hours
Factors	31							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	49.802.26	Dollars
Factors	55999							
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$72.29 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	753.27	Hours
Factors	847							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	564.73	Hours
Factors	635							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	86.09	Hours
Factors	96.8							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.35	Hours
Factors	42							
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB01
Activity ID: 1EFB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors 32 h		0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39	Hours
Factors 6.06 h		0.88934 [SYS 061400] .88934200 - Svsstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,507.69	Dollars
Factors 6193 d		0.88934 [SYS 061400] .88934200 - Svsstem						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15.511.41	Dollars
	Factors 15511.4 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	32.030.22	Dollars
	Factors 32030.2 Dollars								

Activity ID: 1EXXXB0025 Description: 130 Cluster Landlord Functions, FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	8.575	8.538	183.917	49.585	0	233.502	64.003	297.505
3	Preventive maintenance	1.00	each	HC	1.475	1.469	32.203	5.484	0	37.687	11.207	48.893
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	184.835	184.835	0	184.835
Total for Activity 1EXXXB0025:						10.007	216.120	55.068	184.835	456.024	75.210	531.233

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2079 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$174.73 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel
Revised number of work orders - FY03-05 is 81.53% of FY99.
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB01
Activity ID: 1EXXB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	611.87	Hours
Factors	688	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	377.08	Hours
Factors	424	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	564.73	Hours
Factors	635	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	779.95	Hours
Factors	877	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,467.41	Hours
Factors	1650	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.93	Hours
Factors	100	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	62.25	Hours
Factors	70	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	313.94	Hours
Factors	353	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	377.08	Hours
Factors	424	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	377.08	Hours
Factors	424	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	643.88	Hours
Factors	724	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,298.44	Hours
Factors	1460	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	204.55	Hours
Factors	230	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	250.79	Hours
Factors	282	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	554.95	Hours
Factors	624	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	188.54	Hours
Factors	212	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	30.24	Hours
Factors	34	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB01
Activity ID: 1EXXXB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors	32	h						
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.79	Hours
Factors	20	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	41.80	Hours
Factors	47	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	40.55	Hours
Factors	45.6	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.36	Hours
Factors	51	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	15.12	Hours
Factors	17	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	18.50	Hours
Factors	20.8	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.2	h						
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.50	Hours
Factors	20.8	h						
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	32.02	Hours
Factors	36	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.78	Hours
Factors	11	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	64.03	Hours
Factors	72	h						
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	27.57	Hours
Factors	31	h						
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	49.802.26	Dollars
Factors	55999	d						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

WBS No: 1EFB01
Activity ID: 1EXXXB0025

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 817 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$72.29 average

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 03 are expected to be maintained at the same level as FY99. In FY04 it is expected that the maintenance requirements will drop due to PA closure and a requirement for less support personnel

Revised number of work orders - FY03-05 is 81.53% of FY99.

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	753.27	Hours

Factors 847 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	564.73	Hours
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Factors 635 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	86.09	Hours
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Factors 96.8 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.35	Hours
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Factors 42 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
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Factors 32 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.39	Hours
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Factors 6.06 h

0.88934 ISYS 0614001.88934200 - Svstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,507.69	Dollars
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Factors 6193 d

0.88934 ISYS 0614001.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	131.172.10	Dollars

Factors 131172 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	53.662.54	Dollars
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Factors 53662.5 Dollars

WBS No: 1EFB02 Title: 111 Cluster Landlord
Activity ID: 1EFB0035 Description: 111 Cluster Landlord Functions. FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
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WBS No: 1EFB02
Activity ID: 1EFB0035

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

				Type	Hours/Unit	Total	Total	Activity Filter Cost	& Escalation	Cost	Starts in FY	
1	Corrective maintenance	1.00	each	HC	1.951	1.951	42.023	17.627	0	59.650	20.507	80.157
1a	Corrective maintenance	0.79	each	HC	2.154	1.702	36.702	9.786	0	46.488	17.911	64.399
3	Preventive maintenance	1.00	each	HC	374	374	8.195	1.958	0	10.153	3.999	14.152
3a	Preventive maintenance	0.79	each	HC	363	287	6.290	1.087	0	7.377	3.069	10.446
Total for Activity 1EFB0035:						4.314	93.209	30.459	0	123.668	45.486	169.155

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 837 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$344.13 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	143.22	Hours
Factors	286 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	155.24	Hours
Factors	310 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	95.65	Hours
Factors	191 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	230.86	Hours
Factors	461 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	206.82	Hours
Factors	413 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	

WBS No: 1EFB02
Activity ID: 1EFB0035

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.57	Hours
Factors	95	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	197.81	Hours
Factors	395	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.65	Hours
Factors	191	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	79.62	Hours
Factors	159	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	16.03	Hours
Factors	32	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.65	Hours
Factors	191	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	163.26	Hours
Factors	326	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.60	Hours
Factors	123	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	51.58	Hours
Factors	103	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.60	Hours
Factors	127	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	140.72	Hours
Factors	281	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.01	Hours
Factors	14	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.01	Hours
Factors	10	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.51	Hours
Factors	15	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.52	Hours
Factors	23	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.50	Hours
Factors	5	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.52	Hours
Factors	21	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB02
Activity ID: 1EFB0035

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.02	Hours
Factors	20	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.01	Hours
Factors	8	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.01	Hours
Factors	10	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.01	Hours
Factors	10	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.01	Hours
Factors	16	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.50	Hours
Factors	5	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.00	Hours
Factors	6	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.53	Hours
Factors	33	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	7.01	Hours
Factors	14	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	17.627.22	Dollars
Factors	34679	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 395 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$394.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

WBS No: 1EFB02
Activity ID: 1EFB0035

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	139.18	Hours
Factors	277.92 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	92.79	Hours
Factors	185.28 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	150.78	Hours
Factors	301.09 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	46.39	Hours
Factors	92.64 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	201.04	Hours
Factors	401.44 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	192.01	Hours
Factors	383.41 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	224.21	Hours
Factors	447.71 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	92.79	Hours
Factors	185.28 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	15.46	Hours
Factors	30.88 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	77.32	Hours
Factors	154.4 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	92.79	Hours
Factors	185.28 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	158.50	Hours
Factors	316.5 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	50.24	Hours
Factors	100.33 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	61.86	Hours
Factors	123.52 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	319.64	Hours
Factors	638.28	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	136.60	Hours
Factors	272.77	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.64	Hours
Factors	9.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.96	Hours
Factors	13.9	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.54	Hours
Factors	15.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.21	Hours
Factors	22.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.32	Hours
Factors	4.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.05	Hours
Factors	20.07	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.60	Hours
Factors	19.17	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.64	Hours
Factors	9.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.87	Hours
Factors	7.72	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.77	Hours
Factors	1.54	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.92	Hours
Factors	15.82	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.64	Hours
Factors	9.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.51	Hours
Factors	5.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.98	Hours
Factors	31.91	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.09	Hours
Factors	6.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

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751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.83	Hours
Factors	13.64 h		0.3612	Marv 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	12.387.17	Dollars
Factors	24370 d		1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$139.79 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	191.30	Hours
Factors	382	h	0.3612		Mav 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	143.22	Hours
Factors	286	h	0.3612		Mav 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.03	Hours
Factors	44	h	0.3612		Mav 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.51	Hours
Factors	19	h	0.3612		Mav 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	7.01	Hours
Factors	14	h	0.3612		Mav 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	2	h	0.3612		Mav 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		

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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.958.47	Dollars
Factors	1.015	-- FY00 Escalation --	3853	d	0.3612	May 2000 Earned Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 125 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$202.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	185.57	Hours

Factors 370.56 h 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	139.18	Hours
Factors	277.92	h	0.3612	May 2000 Earned Value Factor	

1.38645 [SYS 061300] 1.386448 - Target

750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	21.23	Hours
Factors	42.4	h	0.3612	May 2000 Earned Value Factor	

1.38645 [SYS 061300] 1.386448 - Target

751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.28	Hours
Factors	18.53	h	0.3612	May 2000 Earned Value Factor	

1.38645 [SYS 061300] 1.386448 - Target

751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	6.96	Hours
Factors	13.9	h	0.3612	May 2000 Earned Value Factor	

1.38645 [SYS 061300] 1.386448 - Target

751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	1.06	Hours
Factors	2.12	h	0.3612	May 2000 Earned Value Factor	

1.38645 [SYS 061300] 1.386448 - Target

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.376.35	Dollars
Factors	1.015	-- FY00 Escalation --	2707.77	d	0.3612	May 2000 Earned Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0040 Description: 111 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

WBS No: 1EFB02
Activity ID: 1EFB0040

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Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	3.940	3.940	84.981	31.304	0	116.285	40.536	156.821
1a	Corrective maintenance	0.79	each	HC	3.826	3.022	65.180	17.379	0	82.558	31.091	113.649
3	Preventive maintenance	1.00	each	HC	664	664	14.553	3.478	0	18.031	6.942	24.973
3a	Preventive maintenance	0.79	each	HC	645	510	11.170	1.931	0	13.101	5.328	18.429
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	16.604	16.604	0	16.604
Total for Activity 1EFB0040:						8.136	175.883	54.092	16.604	246.579	83.896	330.475

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>Approximately 837 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$344.13 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064 Basis for adjustment - FCP 1999-8064 funding efficiency return.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <table><tr><td>Carpenter</td><td>15.38%</td></tr><tr><td>Electrician</td><td>32.31% (includes Linemen)</td></tr><tr><td>Maint. Mech</td><td>13.85%</td></tr><tr><td>Painter</td><td>10.77%</td></tr><tr><td>Pipefitter</td><td>23.08%</td></tr><tr><td>Metal Worker</td><td>4.62%</td></tr></table> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>	Carpenter	15.38%	Electrician	32.31% (includes Linemen)	Maint. Mech	13.85%	Painter	10.77%	Pipefitter	23.08%	Metal Worker	4.62%
Carpenter	15.38%												
Electrician	32.31% (includes Linemen)												
Maint. Mech	13.85%												
Painter	10.77%												
Pipefitter	23.08%												
Metal Worker	4.62%												

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	254.35	Hours
Factors	286	h	0.88934 [SYS 061400] .88934200 - Svsstem						
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	169.86	Hours
Factors	191	h	0.88934 [SYS 061400] .88934200 - Svsstem						
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	275.70	Hours
Factors	310	h	0.88934 [SYS 061400] .88934200 - Svsstem						
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	409.99	Hours
Factors	461	h	0.88934 [SYS 061400] .88934200 - Svsstem						
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	351.29	Hours
Factors	395	h	0.88934 [SYS 061400] .88934200 - Svsstem						

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.49	Hours
Factors	95	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	367.30	Hours
Factors	413	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors	32	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	141.41	Hours
Factors	159	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	289.93	Hours
Factors	326	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.95	Hours
Factors	127	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	584.30	Hours
Factors	657	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.60	Hours
Factors	103	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	249.91	Hours
Factors	281	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.34	Hours
Factors	15	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.79	Hours
Factors	20	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.45	Hours
Factors	23	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors	5	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.68	Hours
Factors	21							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	7.11	Hours
Factors	8							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.78	Hours
Factors	2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23	Hours
Factors	16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors	5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.34	Hours
Factors	6							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.35	Hours
Factors	33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	31.304.11	Dollars
Factors	34679	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 395 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$394.56 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:
Carpenter 15.38%

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Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours
Factors 277.92 h								
0.88934 [SYS 061400] .88934200 - Svstem							164.78	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	267.77	Hours
Factors 185.28 h								
0.88934 [SYS 061400] .88934200 - Svstem							82.39	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	340.98	Hours
Factors 92.64 h								
0.88934 [SYS 061400] .88934200 - Svstem							357.02	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	398.17	Hours
Factors 383.41 h								
0.88934 [SYS 061400] .88934200 - Svstem							137.31	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours
Factors 401.44 h								
0.88934 [SYS 061400] .88934200 - Svstem							27.46	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	281.48	Hours
Factors 447.71 h								
0.88934 [SYS 061400] .88934200 - Svstem							164.78	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	27.46	Hours
Factors 154.4 h								
0.88934 [SYS 061400] .88934200 - Svstem							281.48	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours
Factors 316.5 h								
0.88934 [SYS 061400] .88934200 - Svstem							164.78	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours
Factors 185.28 h								
0.88934 [SYS 061400] .88934200 - Svstem							109.85	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.23	Hours
Factors 123.52 h								
0.88934 [SYS 061400] .88934200 - Svstem							567.65	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	567.65	Hours
Factors 638.28 h								
0.88934 [SYS 061400] .88934200 - Svstem								

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750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	242.59	Hours
Factors	272.77							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.38	Hours
Factors	15.05							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours
Factors	13.9							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.85	Hours
Factors	20.07							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.91	Hours
Factors	22.39							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.12	Hours
Factors	4.63							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.05	Hours
Factors	19.17							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.37	Hours
Factors	1.54							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	7.72							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.07	Hours
Factors	15.82							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.50	Hours
Factors	6.18							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.38	Hours
Factors	31.91							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.13	Hours
Factors	13.64							
0.88934 [SYS 061400] .88934200 - Svstem								

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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	21.998.33	Dollars
Factors	24370	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	339.73	Hours

Factors 382 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	254.35	Hours
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Factors 286 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	39.13	Hours
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Factors 44 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	16.90	Hours
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Factors 19 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	12.45	Hours
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Factors 14 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.78	Hours
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Factors 2 h

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.478.03	Dollars
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Factors 1.015 -- FY00 Escalation --

3853 d

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

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maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 125 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$202.17 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	329.55	Hours

Factors 370.56 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours
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Factors 277.92 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.71	Hours
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Factors 42.4 h

0.88934 [SYS 061400] .88934200 - System

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.48	Hours
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Factors 18.53 h

0.88934 [SYS 061400] .88934200 - System

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours
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Factors 13.9 h

0.88934 [SYS 061400] .88934200 - System

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.89	Hours
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Factors 2.12 h

0.88934 [SYS 061400] .88934200 - System

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2,444.26	Dollars
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Factors 2707.77 d

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	10,003.84	Dollars

Factors 10003.8 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6,600.02	Dollars
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Factors 6600.02 Dollars

Activity ID: 1EFB0045 Description: 111 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Time	Hours/Unit	Total	Total	Cost	& Escalation	Cost		

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			Type	Hours/Unit	Total	Total	Activity Filter	Cost	* & Escalation	Cost	Starts In FY	*
1	Corrective maintenance	1.00	each	HC	3.940	3.940	84.981	31.304	0	116.285	29.998	146.283
1a	Corrective maintenance	0.79	each	HC	3.826	3.022	65.180	17.379	0	82.558	23.008	105.567
3	Preventive maintenance	1.00	each	HC	664	664	14.553	3.478	0	18.031	5.137	23.168
3a	Preventive maintenance	0.79	each	HC	645	510	11.170	1.931	0	13.101	3.943	17.044
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	43.540	43.540	0	43.540
Total for Activity 1EFB0045:					8.136	175.883	54.092	43.540	273.515	62.087	335.602	

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 837 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$344.13 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	254.35	Hours
Factors 286 h								
0.88934 [SYS 061400] 88934200 - System								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	275.70	Hours
Factors 310 h								
0.88934 [SYS 061400] 88934200 - System								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors 191 h								
0.88934 [SYS 061400] 88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.49	Hours
Factors 95 h								
0.88934 [SYS 061400] 88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	367.30	Hours
Factors 413 h								
0.88934 [SYS 061400] 88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	351.29	Hours
Factors 395 h								
0.88934 [SYS 061400] 88934200 - System								

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	409.99	Hours
Factors	461							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors	32							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	141.41	Hours
Factors	159							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	289.93	Hours
Factors	326							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.60	Hours
Factors	103							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.95	Hours
Factors	127							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	584.30	Hours
Factors	657							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	249.91	Hours
Factors	281							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.34	Hours
Factors	15							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.79	Hours
Factors	20							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors	5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.45	Hours
Factors	23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.68	Hours
Factors	21							
0.88934 [SYS 061400] .88934200 - Svstem								

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Activity ID: 1EFB0045

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	7.11	Hours
Factors	8							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.78	Hours
Factors	2							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23	Hours
Factors	16							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors	5							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.34	Hours
Factors	6							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.35	Hours
Factors	33							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14							
0.88934 [SYS 061400] .88934200 - System								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	31,304.11	Dollars
Factors	1.015	-- FY00 Escalation --	34679	d				
0.88934 [SYS 061400] .88934200 - System								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 395 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$394.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%

WBS No: 1EFB02
Activity ID: 1EFB0045

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*

Starts In FY *

Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	267.77	Hours
Factors	301.09	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours
Factors	185.28	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours
Factors	277.92	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	82.39	Hours
Factors	92.64	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	398.17	Hours
Factors	447.71	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	340.98	Hours
Factors	383.41	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	357.02	Hours
Factors	401.44	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	27.46	Hours
Factors	30.88	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	137.31	Hours
Factors	154.4	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours
Factors	185.28	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	281.48	Hours
Factors	316.5	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours
Factors	185.28	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	109.85	Hours
Factors	123.52	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.23	Hours
Factors	100.33	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	567.65	Hours
Factors	638.28	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	242.59	Hours
Factors	272.77	h						
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB02
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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours
Factors	13.9							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.38	Hours
Factors	15.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.12	Hours
Factors	4.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.05	Hours
Factors	19.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.85	Hours
Factors	20.07							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.91	Hours
Factors	22.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.37	Hours
Factors	1.54							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	7.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.07	Hours
Factors	15.82							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.50	Hours
Factors	6.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.38	Hours
Factors	31.91							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.13	Hours
Factors	13.64							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	21.998.33	Dollars
Factors	24370	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System								

Line Item 3 - Preventive maintenance

BOE	Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to
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WBS No: 1EFB02
Activity ID: 1EFB0045

Rockv Flats Closure Project
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Project Baseline Devl
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Activity Filter *

Starts In FY *

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	339.73	Hours
Factors 382 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	254.35	Hours
Factors 286 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	39.13	Hours
Factors 44 h		0.88934 ISYS 0614001.88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	16.90	Hours
Factors 19 h		0.88934 ISYS 0614001.88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	12.45	Hours
Factors 14 h		0.88934 ISYS 0614001.88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.78	Hours
Factors 2 h		0.88934 ISYS 0614001.88934200 - Svsstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.478.03	Dollars
Factors 3853 d		1.015 -- FY00 Escalation --						
		0.88934 ISYS 0614001.88934200 - Svsstem						

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 125 preventative maintenance work actions are expected.

WBS No: 1EFB02
Activity ID: 1EFB0045

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$202.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	329.55	Hours
Factors 370.56 h								
						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	247.17	Hours
Factors 277.92 h								
						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	37.71	Hours
Factors 42.4 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	16.48	Hours
Factors 18.53 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	12.36	Hours
Factors 13.9 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.89	Hours
Factors 2.12 h								
						0.88934 [SYS 061400] .88934200 - System		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,444.26	Dollars
Factors 2707.77 d 1.015 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - System		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	29.891.63	Dollars
Factors 29891.6 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13.648.47	Dollars
Factors 13648.5 Dollars								

Activity ID: 1EFB0050 Description: 111 Cluster Landlord Functions. FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	3.940	3.940	84.981	31.304	0	116.285	29.403	145.688
1a	Corrective maintenance	0.79	each	HC	3.826	3.022	65.180	17.379	0	82.558	22.552	105.111
3	Preventive maintenance	1.00	each	HC	664	664	14.553	3.478	0	18.031	5.035	23.067
3a	Preventive maintenance	0.79	each	HC	645	510	11.170	1.931	0	13.101	3.865	16.965

WBS No: 1EFB02
Activity ID: 1EFB0050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	80.430	80.430	0	80.430
Total for Activity 1EFB0050:						8.136	175.883	54.092	80.430	310.405	60.856	371.261

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>Approximately 837 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$344.13 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064 Basis for adjustment - FCP 1999-8064 funding efficiency return.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <table><tr><td>Carpenter</td><td>15.38%</td></tr><tr><td>Electrician</td><td>32.31% (includes Linemen)</td></tr><tr><td>Maint. Mech</td><td>13.85%</td></tr><tr><td>Painter</td><td>10.77%</td></tr><tr><td>Pipefitter</td><td>23.08%</td></tr><tr><td>Metal Worker</td><td>4.62%</td></tr></table> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>	Carpenter	15.38%	Electrician	32.31% (includes Linemen)	Maint. Mech	13.85%	Painter	10.77%	Pipefitter	23.08%	Metal Worker	4.62%
Carpenter	15.38%												
Electrician	32.31% (includes Linemen)												
Maint. Mech	13.85%												
Painter	10.77%												
Pipefitter	23.08%												
Metal Worker	4.62%												

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	254.35	Hours
Factors	286 h					
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	275.70	Hours
Factors	310 h					
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191 h					
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	84.49	Hours
Factors	95 h					
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	367.30	Hours
Factors	413 h					
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	409.99	Hours
Factors	461 h					
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	351.29	Hours
Factors	395 h					

WBS No: 1EFB02
Activity ID: 1EFB0050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors	32							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	141.41	Hours
Factors	159							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	289.93	Hours
Factors	326							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.86	Hours
Factors	191							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.60	Hours
Factors	103							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	584.30	Hours
Factors	657							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.95	Hours
Factors	127							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	249.91	Hours
Factors	281							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.34	Hours
Factors	15							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	4.45	Hours
Factors	5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.45	Hours
Factors	23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.68	Hours
Factors	21							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.79	Hours
Factors	20							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	1.78	Hours
Factors	2							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB02
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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	7.11	Hours
Factors	8							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23	Hours
Factors	16							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.89	Hours
Factors	10							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors	5							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.34	Hours
Factors	6							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.35	Hours
Factors	33							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.45	Hours
Factors	14							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	31,304.11	Dollars
Factors	34679	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System								

Line Item 1a - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 395 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$394.56 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064 Basis for adjustment - FCP 1999-8064 funding efficiency return.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <table><tr><td>Carpenter</td><td>15.38%</td></tr><tr><td>Electrician</td><td>32.31% (includes Linemen)</td></tr><tr><td>Maint. Mech</td><td>13.85%</td></tr><tr><td>Painter</td><td>10.77%</td></tr><tr><td>Pipefitter</td><td>23.08%</td></tr><tr><td>Metal Worker</td><td>4.62%</td></tr></table> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>	Carpenter	15.38%	Electrician	32.31% (includes Linemen)	Maint. Mech	13.85%	Painter	10.77%	Pipefitter	23.08%	Metal Worker	4.62%
Carpenter	15.38%												
Electrician	32.31% (includes Linemen)												
Maint. Mech	13.85%												
Painter	10.77%												
Pipefitter	23.08%												
Metal Worker	4.62%												

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	267.77	Hours
Factors	301.09	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours	
Factors	185.28	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours	
Factors	277.92	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	398.17	Hours	
Factors	447.71	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	340.98	Hours	
Factors	383.41	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	357.02	Hours	
Factors	401.44	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	82.39	Hours	
Factors	92.64	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	137.31	Hours	
Factors	154.4	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours	
Factors	185.28	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	27.46	Hours	
Factors	30.88	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	281.48	Hours	
Factors	316.5	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.78	Hours	
Factors	185.28	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	109.85	Hours	
Factors	123.52	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.23	Hours	
Factors	100.33	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	567.65	Hours	
Factors	638.28	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	242.59	Hours	
Factors	272.77	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours	
Factors	13.9	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.38	Hours
Factors	15.05							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.05	Hours
Factors	19.17							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.85	Hours
Factors	20.07							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.91	Hours
Factors	22.39							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.12	Hours
Factors	4.63							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.37	Hours
Factors	1.54							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	7.72							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.24	Hours
Factors	9.26							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.07	Hours
Factors	15.82							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.50	Hours
Factors	6.18							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.38	Hours
Factors	31.91							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.13	Hours
Factors	13.64							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	21.998.33	Dollars
Factors	1.015	-- FY00 Escalation --	24370	d				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

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Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 335 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$139.79 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 77% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	339.73	Hours
Factors 382 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	254.35	Hours
Factors 286 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	39.13	Hours
Factors 44 h		0.88934 ISYS 0614001.88934200 - Svstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	16.90	Hours
Factors 19 h		0.88934 ISYS 0614001.88934200 - Svstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	12.45	Hours
Factors 14 h		0.88934 ISYS 0614001.88934200 - Svstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.78	Hours
Factors 2 h		0.88934 ISYS 0614001.88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.478.03	Dollars
Factors 3853 d		1.015 -- FY00 Escalation --						
		0.88934 ISYS 0614001.88934200 - Svstem						

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 125 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

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Activity ID: 1EFB0050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$202.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 79% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	329.55	Hours
Factors 370.56 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	247.17	Hours
Factors 277.92 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.71	Hours
Factors 42.4 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.48	Hours
Factors 18.53 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	12.36	Hours
Factors 13.9 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.89	Hours
Factors 2.12 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2,444.26	Dollars
Factors 2707.77 d 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	58,127.68	Dollars
Factors 58127.7 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22,302.43	Dollars
Factors 22302.4 Dollars								

WBS No:	1EFB03	Title:	331 Cluster Landlord
Activity ID:	1EFB0075	Description:	331 Cluster Landlord Functions, FY00

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.81	each	HC	1,470	1,191	25,651	7,488	0	33,139	12,518	45,656
3	Preventive maintenance	0.81	each	HC	249	202	4,426	832	0	5,258	2,160	7,418
Total for Activity 1EFB0075:						1,392	30,077	8,320	0	38,397	14,678	53,075

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance,

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backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 214 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.52	Hours
Factors	224.69 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	103.86	Hours
Factors	207.4 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.24	Hours
Factors	138.27 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	150.03	Hours
Factors	299.58 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.62	Hours
Factors	69.13 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	167.31	Hours
Factors	334.1 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	143.28	Hours
Factors	286.12 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	11.54	Hours
Factors	23.04 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	69.24	Hours
Factors	138.27 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				

WBS No: 1EFB03
Activity ID: 1EFB0075

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Activity Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	57.70	Hours
Factors	115.22	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.24	Hours
Factors	138.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	118.28	Hours
Factors	236.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.49	Hours
Factors	74.87	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	100.82	Hours
Factors	201.32	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	46.16	Hours
Factors	92.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	101.93	Hours
Factors	203.55	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.19	Hours
Factors	10.37	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46	Hours
Factors	6.91	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.62	Hours
Factors	11.23	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.37	Hours
Factors	16.71	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.50	Hours
Factors	14.98	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.17	Hours
Factors	14.31	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	3.46	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.88	Hours
Factors	5.76	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.58	Hours
Factors	1.15	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46	Hours
Factors	6.91	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB03
Activity ID: 1EFB0075

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46	Hours
Factors	6.91	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.91	Hours
Factors	11.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.87	Hours
Factors	3.74	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.31	Hours
Factors	4.61	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.93	Hours
Factors	23.82	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.10	Hours
Factors	10.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	9.243.93	Dollars
Factors	1.015	-- FY00 Escalation --	18186.1	d	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 230 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$82.22 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	116.45	Hours
Factors	232.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB03
Activity ID: 1EFB0075

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	103.86	Hours
Factors	207.4	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.84	Hours
Factors	31.64	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.93	Hours
Factors	13.83	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.19	Hours
Factors	10.37	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.79	Hours
Factors	1.58	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1,027.11	Dollars
Factors	2020.68	d	1.015	-- FY00 Escalation --	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Activity ID: 1EFB0080

Description: 331 Cluster Landlord Functions, FY01

Cost Risk
2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.81	each	HC	2,855	2,312	49,872	13,297	0	63,169	23,789	86,958
3	Preventive maintenance	0.81	each	HC	481	390	8,546	1,477	0	10,024	4,077	14,100
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5,346	5,346	0	5,346
Total for Activity 1EFB0080:						2,702	58,419	14,775	5,346	78,539	27,866	106,405

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>·Approximately 214 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$543.48 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064 Basis for adjustment - FCP 1999-8064 funding efficiency return.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <table><tr><td>Carpenter</td><td>15.38%</td></tr><tr><td>Electrician</td><td>32.31% (includes Linemen)</td></tr><tr><td>Maint. Mech</td><td>13.85%</td></tr><tr><td>Painter</td><td>10.77%</td></tr><tr><td>Pipefitter</td><td>23.08%</td></tr><tr><td>Metal Worker</td><td>4.62%</td></tr></table> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>	Carpenter	15.38%	Electrician	32.31% (includes Linemen)	Maint. Mech	13.85%	Painter	10.77%	Pipefitter	23.08%	Metal Worker	4.62%
Carpenter	15.38%												
Electrician	32.31% (includes Linemen)												
Maint. Mech	13.85%												
Painter	10.77%												
Pipefitter	23.08%												
Metal Worker	4.62%												

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB03
Activity ID: 1EFB0080

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Baseline Devl
1EFB
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Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors	138.27							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	199.83	Hours
Factors	224.69							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45	Hours
Factors	207.4							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	297.13	Hours
Factors	334.1							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	254.46	Hours
Factors	286.12							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	266.43	Hours
Factors	299.58							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.48	Hours
Factors	69.13							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.49	Hours
Factors	23.04							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors	138.27							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	102.47	Hours
Factors	115.22							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors	138.27							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	210.04	Hours
Factors	236.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.98	Hours
Factors	92.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	423.61	Hours
Factors	476.32							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	66.59	Hours
Factors	74.87							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	181.03	Hours
Factors	203.55							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.22	Hours
Factors	10.37							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB03
Activity ID: 1EFB0080

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
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Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.99	Hours
Factors	11.23							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.08	Hours
Factors	3.46							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.73	Hours
Factors	14.31							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.32	Hours
Factors	14.98							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.86	Hours
Factors	16.71							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.12	Hours
Factors	5.76							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Factors	1.15							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.50	Hours
Factors	11.81							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.10	Hours
Factors	4.61							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.33	Hours
Factors	3.74							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	21.18	Hours
Factors	23.82							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	9.05	Hours
Factors	10.18							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	16.416.25	Dollars
Factors	1.015	-- FY00 Escalation --						
			18186.1	d				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

WBS No: 1EFB03
Activity ID: 1EFB0080

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Activity Filter *

Starts In FY *

in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 230 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$82.22 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	245.93	Hours

Factors 276.53 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45	Hours
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Factors 207.4 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.14	Hours
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Factors 31.64 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.30	Hours
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Factors 13.83 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	9.22	Hours
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Factors 10.37 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.41	Hours
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Factors 1.58 h

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1.824.03	Dollars
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Factors 1.015 -- FY00 Escalation --

2020.68 d

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.220.99	Dollars

Factors 3220.99 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.125.04	Dollars
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Factors 2125.04 Dollars

Activity ID: 1EFB0085 Description: 331 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.81	each	HC	2.855	2.312	49.872	13.297	0	63.169	17.605	80.774

WBS No: 1EFB03
Activity ID: 1EFB0085

Rockv Flats Closure Project
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3	Preventive maintenance	0.81	each	HC	481	390	8,546	1,477	0	10.024	3.017	13.041
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13.986	13.986	0	13.986
Total for Activity 1EFB0085:						2,702	58,419	14,775	13,986	87,179	20,622	107,801

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors 138.27 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	199.83	Hours
Factors 224.69 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45	Hours
Factors 207.4 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	297.13	Hours
Factors 334.1 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	254.46	Hours
Factors 286.12 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	266.43	Hours
Factors 299.58 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.48	Hours
Factors 69.13 h								
						0.88934	[SYS 061400] .88934200 - System	

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors	138.27							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	102.47	Hours
Factors	115.22							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.49	Hours
Factors	23.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors	138.27							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	210.04	Hours
Factors	236.18							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	66.59	Hours
Factors	74.87							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.98	Hours
Factors	92.18							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	423.61	Hours
Factors	476.32							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	181.03	Hours
Factors	203.55							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.22	Hours
Factors	10.37							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.99	Hours
Factors	11.23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.73	Hours
Factors	14.31							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.32	Hours
Factors	14.98							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.86	Hours
Factors	16.71							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.08	Hours
Factors	3.46							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB03
Activity ID: 1EFB0085

Rockv Flats Closure Project
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*

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Factors	1.15							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.12	Hours
Factors	5.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.50	Hours
Factors	11.81							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	21.18	Hours
Factors	23.82							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.33	Hours
Factors	3.74							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.10	Hours
Factors	4.61							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	9.05	Hours
Factors	10.18							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	16.416.25	Dollars
Factors	18186.1	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System								

Line Item 3 - Preventive maintenance

BOE	<p>Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.</p> <p>The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 230 preventative maintenance work actions are expected.</p> <p>Data Source - MMS and P&I Reporting System SVAR for FY98</p> <p>Item Desc - Fiscal Year Preventive Maintenance</p> <p>Breakdown of Data:</p> <p>Item - Preventive maintenance</p> <p>Units - Work Packages</p> <p>Unit Cost - \$82.22 average in this cluster</p> <p>Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064</p> <p>Basis for adjustment - FCP 1999-8064 funding efficiency return.</p> <p>The percentage of maintenance effort (labor Type) required is as follows:</p> <table><tr><td>Electrician</td><td>50.00% (includes Linemen)</td></tr><tr><td>Maint. Mech</td><td>37.50%</td></tr><tr><td>Pipefitter</td><td>12.50%</td></tr></table> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>	Electrician	50.00% (includes Linemen)	Maint. Mech	37.50%	Pipefitter	12.50%
Electrician	50.00% (includes Linemen)						
Maint. Mech	37.50%						
Pipefitter	12.50%						

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB03
Activity ID: 1EFB0085

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	245.93	Hours
Factors	276.53							
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45	Hours
Factors	207.4							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.14	Hours
Factors	31.64							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.30	Hours
Factors	13.83							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	9.22	Hours
Factors	10.37							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.41	Hours
Factors	1.58							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,824.03	Dollars
Factors	1.015	-- FY00 Escalation --	2020.68	d				
0.88934 [SYS 061400] .88934200 - Svsstem								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9.601.67	Dollars
	Factors 9601.67 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4.384.11	Dollars
	Factors 4384.11 Dollars								

Activity ID: 1EFB0090 Description: 331 Cluster Landlord Functions. FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.81	each	HC	2.855	2.312	49.872	13.297	0	63.169	17.256	80.425
3	Preventive maintenance	0.81	each	HC	481	390	8.546	1.477	0	10.024	2.957	12.981
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	25.832	25.832	0	25.832
Total for Activity 1EFB0090:						2.702	58.419	14.775	25.832	99.025	20.213	119.238

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$543.48 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

WBS No: 1EFB03
Activity ID: 1EFB0090

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter

Baseline Devl
1EFB
*

Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors 138.27 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	199.83	Hours
Factors 224.69 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45	Hours
Factors 207.4 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	254.46	Hours
Factors 286.12 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	297.13	Hours
Factors 334.1 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.48	Hours
Factors 69.13 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	266.43	Hours
Factors 299.58 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	102.47	Hours
Factors 115.22 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors 138.27 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.49	Hours
Factors 23.04 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	122.97	Hours
Factors 138.27 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	210.04	Hours
Factors 236.18 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	66.59	Hours
Factors 74.87 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	423.61	Hours
Factors 476.32 h								
						0.88934 ISYS 0614001 .88934200 - Svsstem		

WBS No: 1EFB03
Activity ID: 1EFB0090

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
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1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.98	Hours
Factors	92.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	181.03	Hours
Factors	203.55							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	9.22	Hours
Factors	10.37							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.99	Hours
Factors	11.23							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.73	Hours
Factors	14.31							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.86	Hours
Factors	16.71							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.08	Hours
Factors	3.46							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.32	Hours
Factors	14.98							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.12	Hours
Factors	5.76							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Factors	1.15							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.15	Hours
Factors	6.91							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.50	Hours
Factors	11.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	21.18	Hours
Factors	23.82							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.10	Hours
Factors	4.61							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.33	Hours
Factors	3.74							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB03
Activity ID: 1EFB0090

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	9.05	Hours
Factors 10.18 h		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	16.416.25	Dollars
Factors 1.015 -- FY00 Escalation --		18186.1 d						
		0.88934 [SYS 061400] .88934200 - Svstem						

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 230 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$82.22 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 81% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	245.93	Hours
Factors 276.53 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	184.45	Hours
Factors 207.4 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.14	Hours
Factors 31.64 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.30	Hours
Factors 13.83 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	9.22	Hours
Factors 10.37 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.41	Hours
Factors 1.58 h		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1.824.03	Dollars
Factors 1.015 -- FY00 Escalation --		2020.68 d						
		0.88934 [SYS 061400] .88934200 - Svstem						

WBS No: 1EFB03
Activity ID: 1EFB0090

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.668.85	Dollars
Factors 18668.9 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7.162.86	Dollars
Factors 7162.86 Dollars								

WBS No: 1EFB04 Title: 551 Cluster Landlord
Activity ID: 1EFB0095 Description: 551 Cluster Landlord Functions, FY00

Line Item		Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1		Corrective maintenance	1.00	each	HC	23	23	487	130	0	617	238	855
1a		Corrective maintenance	0.96	each	HC	4.569	4.386	94.909	28.067	0	122.975	46.315	169.291
1b		Corrective maintenance	1.00	each	HC	401	401	8.638	2.795	0	11.433	4.215	15.648
3		Preventive maintenance	1.00	each	HC	4	4	83	14	0	98	41	139
3a		Preventive maintenance	0.96	each	HC	1.079	1.036	22.707	3.925	0	26.632	11.081	37.713
3b		Preventive maintenance	1.00	each	HC	82	82	1.797	311	0	2.107	877	2.984
Total for Activity 1EFB0095:							5.932	128.620	35.242	0	163.863	62.767	226.629

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 5 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$327 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.58	Hours
Factors 3.16 h 0.3612 May 2000 Earned Value Factor								
1.38645 [SYS 061300] 1.386448 - Target								

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.94	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.46	Hours
Factors	2.92	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.35	Hours
Factors	4.7	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.01	Hours
Factors	4.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.11	Hours
Factors	4.21	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours
Factors	0.97	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	1.62	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.94	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.16	Hours
Factors	0.32	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.66	Hours
Factors	3.32	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.94	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	1.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.65	Hours
Factors	1.3	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.36	Hours
Factors	6.7	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.43	Hours
Factors	2.86	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.08	Hours
Factors	0.15	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.08	Hours
Factors	0.16	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.21	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.23	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.08	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.17	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.06	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.33	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.14	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	129.94	Dollars
Factors	255.63	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Approximately 752 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$615.72 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	346.59	Hours
Factors	692.1 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	275.66	Hours
Factors	550.45 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	413.48	Hours
Factors	825.67 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	194.35	Hours
Factors	388.1 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	137.83	Hours
Factors	275.22 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	199.13	Hours
Factors	397.64 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	229.39	Hours
Factors	458.07 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	45.94	Hours
Factors	91.74 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	229.72	Hours
Factors	458.71 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	275.66	Hours
Factors	550.45 h		0.3612	May 2000 Earned Value Factor				
						1.38645	ISYS 0613001	1.386448 - Target

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	320.64	Hours
Factors	640.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	275.66	Hours
Factors	550.45	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	582.54	Hours
Factors	1163.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	149.27	Hours
Factors	298.08	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	182.77	Hours
Factors	364.97	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	405.82	Hours
Factors	810.37	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.78	Hours
Factors	27.52	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.40	Hours
Factors	44.73	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.67	Hours
Factors	41.28	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.86	Hours
Factors	59.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.89	Hours
Factors	13.76	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.52	Hours
Factors	56.95	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	33.30	Hours
Factors	66.5	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	13.78	Hours
Factors	27.52	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
Factors	4.59	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	11.49	Hours
Factors	22.94	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.78	Hours
Factors	27.52	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.54	Hours
Factors	47.01 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.48	Hours
Factors	94.81 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.19	Hours
Factors	18.35 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.46	Hours
Factors	14.9 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	20.29	Hours
Factors	40.52 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	29,236.21	Dollars
Factors	1.015 -- FY00 Escalation --	57518 d	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 74 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31 Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.02	Hours
Factors	67.94 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter *
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.94	Hours
Factors	41.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	31.40	Hours
Factors	62.71	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.47	Hours
Factors	20.9	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.16	Hours
Factors	16.3	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors	86.51	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.36	Hours
Factors	90.58	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.49	Hours
Factors	6.97	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.94	Hours
Factors	41.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	17.45	Hours
Factors	34.84	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.94	Hours
Factors	41.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.77	Hours
Factors	71.42	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.96	Hours
Factors	27.87	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.34	Hours
Factors	22.64	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.56	Hours
Factors	59.03	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	30.82	Hours
Factors	61.55	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.70	Hours
Factors	3.4	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	2.09	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.57	Hours
Factors	3.14	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.53	Hours
Factors	5.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	1.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	4.33	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.27	Hours
Factors	4.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.87	Hours
Factors	1.74	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.35	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	2.09	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	2.09	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	3.57	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.70	Hours
Factors	1.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.61	Hours
Factors	7.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.57	Hours
Factors	1.13	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.54	Hours
Factors	3.08	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,795.13	Dollars
Factors	1.015	-- FY00 Escalation --	5499.01	d	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

·Approximately 11 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$24.18 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.95	Hours
Factors	3.89 h	0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.46	Hours
Factors	2.92 h	0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors	0.44 h	0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.19 h	0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target				
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.08	Hours
Factors	0.15 h	0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target				
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.02 h	0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target				
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	14.44	Dollars
Factors	28.4 d	1.015 -- FY00 Escalation --		0.3612 May 2000 Earned Value Factor		1.38645 ISYS 0613001 1.386448 - Target		

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 557 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$135.15 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	551.31	Hours
Factors	1100.9 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	413.48	Hours
Factors	825.67 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	63.09	Hours
Factors	125.98 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	27.56	Hours
Factors	55.04 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	20.67	Hours
Factors	41.28 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.15	Hours
Factors	6.3 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.089.00	Dollars
Factors	1.015 -- FY00 Escalation --		8044.51 d		0.3612 May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 107 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance

WBS No: 1EFB04
Activity ID: 1EFB0095

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Units - Work Packages
Unit Cost - \$53.44 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.
Revised number of work orders - none
Basis for adjustment - none.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	41.88	Hours
Factors	83.62 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	31.40	Hours
Factors	62.71 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.79	Hours
Factors	9.57 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.09	Hours
Factors	4.18 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.57	Hours
Factors	3.14 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.24	Hours
Factors	0.48 h		0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	310.57	Dollars
Factors	1.015 -- FY00 Escalation --		611 d		0.3612	May 2000	Earned Value Factor	
						1.38645 [SYS 061300]	1.386448 - Target	

Activity ID: 1EFB0100 Description: 551 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	40	40	865	231	0	1,095	412	1,508
1a	Corrective maintenance	0.96	each	HC	11.365	10.911	235.313	62.741	0	298.053	112.244	410.298
1b	Corrective maintenance	1.00	each	HC	863	863	18,618	4,964	0	23,581	8,881	32,462
3	Preventive maintenance	1.00	each	HC	7	7	148	26	0	174	71	245
3a	Preventive maintenance	0.96	each	HC	1,917	1,840	40,325	6,971	0	47,296	19,235	66,531
3b	Preventive maintenance	1.00	each	HC	146	146	3,191	552	0	3,742	1,522	5,264
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27.313	27,313	0	27,313
Total for Activity 1EFB0100:						13.806	298,458	75,483	27.313	401,255	142,365	543,619

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB04
Activity ID: 1EFB0100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.60	Hours
Factors 2.92 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.81	Hours
Factors 3.16 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.73	Hours
Factors 1.94 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.74	Hours
Factors 4.21 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.18	Hours
Factors 4.7 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.58	Hours
Factors 4.02 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	1.73	Hours
Factors 1.94 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.28	Hours
Factors 0.32 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.44	Hours
Factors 1.62 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.95	Hours
Factors 3.32 h		0.88934 ISYS 0614001.88934200 - Svsstem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.73	Hours
Factors 1.94 h		0.88934 ISYS 0614001.88934200 - Svsstem						

WBS No: 1EFB04
Activity ID: 1EFB0100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.16	Hours
Factors	1.3							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.96	Hours
Factors	6.7							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.54	Hours
Factors	2.86							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.15							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	0.07	Hours
Factors	0.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29	Hours
Factors	0.33							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB04
Activity ID: 1EFB0100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
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Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.14	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	230.75	Dollars
Factors	255.63	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 752 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$615.72 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	489.54	Hours
Factors	550.45	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors	825.67	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	795.53	Hours
Factors	894.51	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB04
Activity ID: 1EFB0100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.060.66	Hours
Factors	1192.64							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.013.02	Hours
Factors	1139.07							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	244.76	Hours
Factors	275.22							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.182.91	Hours
Factors	1330.1							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	407.95	Hours
Factors	458.71							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	81.59	Hours
Factors	91.74							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54	Hours
Factors	550.45							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	836.22	Hours
Factors	940.27							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54	Hours
Factors	550.45							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	265.10	Hours
Factors	298.08							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	326.36	Hours
Factors	366.97							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.686.42	Hours
Factors	1896.26							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	720.70	Hours
Factors	810.37							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.78	Hours
Factors	44.73							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	36.71	Hours
Factors	41.28							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.03	Hours
Factors	59.63							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB04
Activity ID: 1EFB0100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.14	Hours
Factors	66.5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.65	Hours
Factors	56.95							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.24	Hours
Factors	13.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.08	Hours
Factors	4.59							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.40	Hours
Factors	22.94							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	41.81	Hours
Factors	47.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.32	Hours
Factors	94.81							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.32	Hours
Factors	18.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.25	Hours
Factors	14.9							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	36.04	Hours
Factors	40.52							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	65,354.71	Dollars
Factors	72400.6	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$475.24 average for this cluster

WBS No: 1EFB04
Activity ID: 1EFB0100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.
Revised number of work orders - none
Basis for adjustment - none.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31 Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	55.77	Hours
Factors	62.71		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	37.18	Hours
Factors	41.81		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	60.42	Hours
Factors	67.94		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	89.84	Hours
Factors	101.02		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	76.94	Hours
Factors	86.51		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	80.56	Hours
Factors	90.58		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	18.59	Hours
Factors	20.9		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	6.20	Hours
Factors	6.97		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	37.18	Hours
Factors	41.81		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	30.98	Hours
Factors	34.84		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	37.18	Hours
Factors	41.81		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	63.52	Hours
Factors	71.42		h					
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	24.79	Hours
Factors	27.87		h					
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB04
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Rockv Flats Closure Project
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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	128.09	Hours
Factors	144.03							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.13	Hours
Factors	22.64							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	54.74	Hours
Factors	61.55							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.02	Hours
Factors	3.4							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors	3.14							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.85	Hours
Factors	4.33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.49	Hours
Factors	5.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.55	Hours
Factors	1.74							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.31	Hours
Factors	0.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	1.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.24	Hours
Factors	1.39							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.40	Hours
Factors	7.2	h						
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.74	Hours
Factors	3.08	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4.963.86	Dollars
Factors	1.015	-- FY00 Escalation --	5499.01	d				
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$24.18 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46	Hours
Factors	3.89	h						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
Factors	2.92	h						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.39	Hours
Factors	0.44	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.15	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB04
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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	25.64	Dollars
Factors	28.4	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 557 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$135.15 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	979.08	Hours

Factors 1100.9 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors	825.67	h						

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.04	Hours
Factors	125.98	h						

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.95	Hours
Factors	55.04	h						

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	36.71	Hours
Factors	41.28	h						

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.60	Hours
Factors	6.3	h						

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	7.261.64	Dollars
Factors	8044.51	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

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Activity ID: 1EFB0100

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The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	74.37	Hours

Factors 83.62 h

0.88934 ISYS 0614001.88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	55.77	Hours
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Factors 62.71 h

0.88934 ISYS 0614001.88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.51	Hours
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Factors 9.57 h

0.88934 ISYS 0614001.88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.72	Hours
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Factors 4.18 h

0.88934 ISYS 0614001.88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.79	Hours
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Factors 3.14 h

0.88934 ISYS 0614001.88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.43	Hours
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Factors 0.48 h

0.88934 ISYS 0614001.88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	551.54	Dollars
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Factors 1.015 -- FY00 Escalation -- 611 d

0.88934 ISYS 0614001.88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16.455.94	Dollars

Factors 16455.9 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.856.77	Dollars
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Factors 10856.8 Dollars

Activity ID: 1EFB0105 Description: 551 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

WBS No: 1EFB04
Activity ID: 1EFB0105

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Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	40	40	865	231	0	1,095	305	1,400
1a	Corrective maintenance	0.96	each	HC	11.365	10.911	235.313	62.741	0	298.053	83.065	381.119
1b	Corrective maintenance	1.00	each	HC	863	863	18,618	4,964	0	23,581	6,572	30,153
3	Preventive maintenance	1.00	each	HC	7	7	148	26	0	174	52	226
3a	Preventive maintenance	0.96	each	HC	1.917	1.840	40.325	6.971	0	47.296	14.235	61.530
3b	Preventive maintenance	1.00	each	HC	146	146	3,191	552	0	3,742	1,126	4,868
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	71.453	71.453	0	71.453
Total for Activity 1EFB0105:						13.806	298.458	75.483	71.453	445.395	105.356	550.751

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.81	Hours
Factors	3.16 h	0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.73	Hours
Factors	1.94 h	0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.60	Hours
Factors	2.92 h	0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.18	Hours
Factors	4.7 h	0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.58	Hours
Factors	4.02 h	0.88934 [SYS 061400] .88934200 - System						

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.74	Hours
Factors	4.21							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
Factors	3.32							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.96	Hours
Factors	6.7							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.16	Hours
Factors	1.3							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.54	Hours
Factors	2.86							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.15							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.16							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.23							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB04
Activity ID: 1EFB0105

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Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29	Hours
Factors	0.33	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.14	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	230.75	Dollars
Factors	255.63	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 752 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$615.72 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors 825.67 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54	Hours
Factors 550.45 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	795.53	Hours
Factors 894.51 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,060.66	Hours
Factors 1192.64 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,013.02	Hours
Factors 1139.07 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	244.76	Hours
Factors 275.22 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,182.91	Hours
Factors 1330.1 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	407.95	Hours
Factors 458.71 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	81.59	Hours
Factors 91.74 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54	Hours
Factors 550.45 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	836.22	Hours
Factors 940.27 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54	Hours
Factors 550.45 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	265.10	Hours
Factors 298.08 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	326.36	Hours
Factors 366.97 h								
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,686.42	Hours
Factors 1896.26 h								
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	720.70	Hours
Factors	810.37							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	39.78	Hours
Factors	44.73							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	36.71	Hours
Factors	41.28							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.14	Hours
Factors	66.5							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.03	Hours
Factors	59.63							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.24	Hours
Factors	13.76							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.65	Hours
Factors	56.95							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.08	Hours
Factors	4.59							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.40	Hours
Factors	22.94							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	41.81	Hours
Factors	47.01							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.32	Hours
Factors	94.81							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.32	Hours
Factors	18.35							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.25	Hours
Factors	14.9							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	36.04	Hours
Factors	40.52							

WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	65,354.71	Dollars
Factors	72400.6 d	1.015	-- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.

Revised number of work orders - none

Basis for adjustment - none.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31 Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.42	Hours
Factors	67.94 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors	62.71 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	76.94	Hours
Factors	86.51 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.84	Hours
Factors	101.02 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.56	Hours
Factors	90.58 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.59	Hours
Factors	20.9 h							
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
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1EFB
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Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.20	Hours
Factors	6.97							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	30.98	Hours
Factors	34.84							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.13	Hours
Factors	22.64							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	128.09	Hours
Factors	144.03							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.79	Hours
Factors	27.87							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	54.74	Hours
Factors	61.55							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.02	Hours
Factors	3.4							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors	3.14							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.49	Hours
Factors	5.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.85	Hours
Factors	4.33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB04
Activity ID: 1EFB0105

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Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.31	Hours
Factors	0.35							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.55	Hours
Factors	1.74							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.24	Hours
Factors	1.39							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	1.13							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.40	Hours
Factors	7.2							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.74	Hours
Factors	3.08							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4.963.86	Dollars
Factors	1.015	-- FY00 Escalation --	5499.01	d				
0.88934 [SYS 061400] .88934200 - System								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$24.18 average in this cluster
UUnit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00% (includes Linemen)
Maint. Mech	37.50%
Pipefitter	12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
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Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46	Hours
Factors	3.89	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
Factors	2.92	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.39	Hours
Factors	0.44	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.15	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	25.64	Dollars
Factors	28.4	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 557 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$135.15 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	979.08	Hours
Factors	1100.9	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors	825.67	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.04	Hours
Factors	125.98	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.95	Hours
Factors	55.04	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	36.71	Hours
Factors	41.28	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.60	Hours
Factors	6.3	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7,261.64	Dollars
Factors	8044.51	d						
						1.015	-- FY00 Escalation --	
						0.88934	[SYS 061400] .88934200 - Svstem	

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$53.44 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99.
Revised number of work orders - none
Basis for adjustment - none.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	74.37	Hours
Factors	83.62	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors	62.71	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.51	Hours
Factors	9.57	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors	4.18	h						
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB04
Activity ID: 1EFB0105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.79	Hours
Factors	3.14	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.43	Hours
Factors	0.48	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	551.54	Dollars
Factors	1.015	-- FY00 Escalation --	611	d				
0.88934 [SYS 061400] .88934200 - Svsstem								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	49.054.63	Dollars
	Factors 49054.6 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22.398.27	Dollars
	Factors 22398.3 Dollars								

Activity ID: 1EFB0110 Description: 551 Cluster Landlord Functions, FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	40	40	865	231	0	1.095	299	1.394
1a	Corrective maintenance	0.96	each	HC	11.365	10.911	235.313	62.741	0	298.053	81.418	379.472
1b	Corrective maintenance	0.10	each	HC	863	86	1.862	496	0	2.358	644	3.002
3	Preventive maintenance	1.00	each	HC	7	7	148	26	0	174	51	225
3a	Preventive maintenance	0.96	each	HC	1.917	1.840	40.325	6.971	0	47.296	13.952	61.248
3b	Preventive maintenance	0.10	each	HC	146	15	319	55	0	374	110	485
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	123.295	123.295	0	123.295
Total for Activity 1EFB0110:						12.899	278.831	70.520	123.295	472.645	96.476	569.121

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$327 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

WBS No: 1EFB04
Activity ID: 1EFB0110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<u>Cost Element</u>		<u>Skill</u>		<u>Department</u>		<u>Curve</u>	<u>Quantity</u>	<u>Units</u>
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.81	Hours
<i>Factors</i> 3.16 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
<i>Factors</i> 1.94 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
<i>Factors</i> 2.92 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.18	Hours
<i>Factors</i> 4.7 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.58	Hours
<i>Factors</i> 4.02 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.74	Hours
<i>Factors</i> 4.21 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
<i>Factors</i> 1.62 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
<i>Factors</i> 1.94 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
<i>Factors</i> 0.32 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
<i>Factors</i> 3.32 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
<i>Factors</i> 1.94 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
<i>Factors</i> 1.05 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.96	Hours
<i>Factors</i> 6.7 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.16	Hours
<i>Factors</i> 1.3 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.54	Hours
<i>Factors</i> 2.86 h		0.88934 ISYS 0614001 .88934200 - Svstem						
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
<i>Factors</i> 0.97 h		0.88934 ISYS 0614001 .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
<i>Factors</i> 0.15 h		0.88934 ISYS 0614001 .88934200 - Svstem						

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.16							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.23							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29	Hours
Factors	0.33							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.14							
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	230.75	Dollars
Factors	255.63							
			1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

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Activity ID: 1EFB0110

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was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 752 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$615.72 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	489.54	Hours

Factors 550.45 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	734.30	Hours
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Factors 825.67 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	795.53	Hours
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Factors 894.51 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	244.76	Hours
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Factors 275.22 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1,182.91	Hours
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Factors 1330.1 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1,060.66	Hours
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Factors 1192.64 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1,013.02	Hours
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Factors 1139.07 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	407.95	Hours
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Factors 458.71 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	81.59	Hours
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Factors 91.74 h

0.88934 ISYS 0614001 .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	489.54	Hours
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Factors 550.45 h

0.88934 ISYS 0614001 .88934200 - Svsstem

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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	489.54	Hours
Factors	550.45							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	836.22	Hours
Factors	940.27							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	265.10	Hours
Factors	298.08							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	326.36	Hours
Factors	366.97							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1,686.42	Hours
Factors	1896.26							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	720.70	Hours
Factors	810.37							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	36.71	Hours
Factors	41.28							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.78	Hours
Factors	44.73							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.65	Hours
Factors	56.95							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.24	Hours
Factors	13.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.03	Hours
Factors	59.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.14	Hours
Factors	66.5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.08	Hours
Factors	4.59							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.40	Hours
Factors	22.94							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	27.52							
0.88934 [SYS 061400] .88934200 - Svstem								

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	41.81	Hours
Factors	47.01	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.32	Hours
Factors	94.81	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.32	Hours
Factors	18.35	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.25	Hours
Factors	14.9	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	36.04	Hours
Factors	40.52	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	65.354.71	Dollars
Factors	72400.6	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$475.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31 Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.42	Hours
Factors	67.94	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors	62.71	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB04
Activity ID: 1EFB0110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.59	Hours
Factors	20.9							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.56	Hours
Factors	90.58							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	76.94	Hours
Factors	86.51							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.84	Hours
Factors	101.02							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.20	Hours
Factors	6.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	30.98	Hours
Factors	34.84							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KD10H	776 Complex Steelworkers	Linear	24.79	Hours
Factors	27.87							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	128.09	Hours
Factors	144.03							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.13	Hours
Factors	22.64							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	54.74	Hours
Factors	61.55							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors	3.14							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.02	Hours
Factors	3.4							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB04
Activity ID: 1EFB0110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.49	Hours
Factors	5.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.85	Hours
Factors	4.33	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.31	Hours
Factors	0.35	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.55	Hours
Factors	1.74	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.24	Hours
Factors	1.39	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.40	Hours
Factors	7.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	1.13	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.74	Hours
Factors	3.08	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.963.86	Dollars
Factors	1.015	-- FY00 Escalation --	5499.01	d				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance

WBS No: 1EFB04
Activity ID: 1EFB0110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$24.18 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.46	Hours
Factors 3.89 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60	Hours
Factors 2.92 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.39	Hours
Factors 0.44 h								
0.88934 [SYS 061400] .88934200 - System								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors 0.19 h								
0.88934 [SYS 061400] .88934200 - System								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors 0.15 h								
0.88934 [SYS 061400] .88934200 - System								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors 0.02 h								
0.88934 [SYS 061400] .88934200 - System								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	25.64	Dollars
Factors 28.4 d 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 557 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$135.15 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 96% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

WBS No: 1EFB04
Activity ID: 1EFB0110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	979.08	Hours
Factors 1100.9 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	734.30	Hours
Factors 825.67 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	112.04	Hours
Factors 125.98 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.95	Hours
Factors 55.04 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	36.71	Hours
Factors 41.28 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.60	Hours
Factors 6.3 h		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7,261.64	Dollars
Factors 8044.51 d		1.015 -- FY00 Escalation --						
		0.88934 [SYS 061400] .88934200 - Svstem						

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

WBS No: 1EFB04
Activity ID: 1EFB0110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	74.37	Hours
Factors 83.62 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors 62.71 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.51	Hours
Factors 9.57 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors 4.18 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors 3.14 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors 0.48 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	551.54	Dollars
Factors 611 d 1.015 -- FY00 Escalation --								
						0.88934	ISYS 0614001.88934200 - Svsstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	89.106.29	Dollars
Factors 89106.3 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	34.188.31	Dollars
Factors 34188.3 Dollars								

Activity ID: 1EFB0115 Description: 551 Cluster Landlord Functions. FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.10	each	HC	40	4	86	23	0	110	24	134
1b	Corrective maintenance	0.10	each	HC	863	86	1,862	496	0	2,358	525	2,883
3	Preventive maintenance	0.10	each	HC	7	1	15	3	0	17	4	22
3b	Preventive maintenance	0.10	each	HC	146	15	319	55	0	374	90	464
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	499	499	0	499
Total for Activity 1EFB0115:						106	2,282	577	499	3,358	644	4,002

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Units - Work Packages
Unit Cost - \$327 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.
Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.81Hours
Factors	3.16	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73Hours
Factors	1.94	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60Hours
Factors	2.92	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.18Hours
Factors	4.7	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.58Hours
Factors	4.02	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.74Hours
Factors	4.21	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44Hours
Factors	1.62	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73Hours
Factors	1.94	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28Hours
Factors	0.32	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95Hours
Factors	3.32	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73Hours
Factors	1.94	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93Hours
Factors	1.05	h						
							0.88934 [SYS 061400] .88934200 - Svstem	

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.96	Hours
Factors	6.7	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.16	Hours
Factors	1.3	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.54	Hours
Factors	2.86	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	0.14	Hours
Factors	0.16	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.15	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.23	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.29	Hours
Factors	0.33							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	0.12	Hours
Factors	0.14							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	230.75	Dollars
Factors	255.63							
1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$475.24 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.
Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	37.18	Hours
Factors	41.81							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	55.77	Hours
Factors	62.71							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	60.42	Hours
Factors	67.94							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	80.56	Hours
Factors	90.58							
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	76.94	Hours
Factors	86.51							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.84	Hours
Factors	101.02							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.59	Hours
Factors	20.9							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	30.98	Hours
Factors	34.84							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.20	Hours
Factors	6.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	128.09	Hours
Factors	144.03							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.79	Hours
Factors	27.87							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.13	Hours
Factors	22.64							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	54.74	Hours
Factors	61.55							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	3.02	Hours
Factors	3.4							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors	3.14							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	4.49	Hours
Factors	5.05							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.85	Hours
Factors	4.33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.31	Hours
Factors	0.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.55	Hours
Factors	1.74							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.24	Hours
Factors	1.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.40	Hours
Factors	7.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	1.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.74	Hours
Factors	3.08							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.963.86	Dollars
Factors	1.015	-- FY00 Escalation --	5499.01	d				
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$24.18 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.
Basis for adjustment - Planning assumption

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	3.46	Hours
Factors	3.89 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.60	Hours
Factors	2.92 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.39	Hours
Factors	0.44 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.17	Hours
Factors	0.19 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.13	Hours
Factors	0.15 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.02	Hours
Factors	0.02 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	25.64	Dollars
Factors	28.4 d		1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200	- Svstem

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

WBS No: 1EFB04
Activity ID: 1EFB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	74.37	Hours
Factors 83.62 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors 62.71 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.51	Hours
Factors 9.57 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors 4.18 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors 3.14 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors 0.48 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	551.54	Dollars
Factors 1.015 -- FY00 Escalation -- 611 d								
						0.88934	ISYS 0614001.88934200 - Svsstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	162.87	Dollars
Factors 162.875 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	336.33	Dollars
Factors 336.328 Dollars								

Activity ID: 1EXXB0115 Description: 551 Cluster Landlord Functions, FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.10	each	HC	40	4	86	23	0	109	30	139
1b	Corrective maintenance	0.10	each	HC	863	86	1,854	494	0	2,348	645	2,993
3	Preventive maintenance	0.10	each	HC	7	1	15	3	0	17	5	22
3b	Preventive maintenance	0.10	each	HC	146	14	318	55	0	373	111	483
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1,941	1,941	0	1,941
Total for Activity 1EXXB0115:						105	2,272	575	1,941	4,788	791	5,578

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

WBS No: 1EFB04
Activity ID: 1EXXXB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Units - Work Packages
Unit Cost - \$327 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.
Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.81Hours
Factors	3.16	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73Hours
Factors	1.94	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.60Hours
Factors	2.92	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.18Hours
Factors	4.7	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.58Hours
Factors	4.02	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.74Hours
Factors	4.21	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44Hours
Factors	1.62	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73Hours
Factors	1.94	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28Hours
Factors	0.32	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95Hours
Factors	3.32	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73Hours
Factors	1.94	h						
							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93Hours
Factors	1.05	h						
							0.88934 [SYS 061400] .88934200 - Svstem	

WBS No: 1EFB04
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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.96	Hours
Factors	6.7	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.16	Hours
Factors	1.3	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.54	Hours
Factors	2.86	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	0.14	Hours
Factors	0.16	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.15	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.23	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB04
Activity ID: 1EXXXB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29	Hours
Factors	0.33	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.14	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	230.75	Dollars
Factors	255.63	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 74 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$475.24 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.
Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31 Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Denarment		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors	62.71	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.42	Hours
Factors	67.94	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.56	Hours
Factors	90.58	h							
							0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB04
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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	76.94	Hours
Factors	86.51							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.84	Hours
Factors	101.02							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.59	Hours
Factors	20.9							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	30.98	Hours
Factors	34.84							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.20	Hours
Factors	6.97							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.18	Hours
Factors	41.81							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.13	Hours
Factors	22.64							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	128.09	Hours
Factors	144.03							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.79	Hours
Factors	27.87							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	54.74	Hours
Factors	61.55							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	3.02	Hours
Factors	3.4							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors	3.14							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	4.49	Hours
Factors	5.05							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB04
Activity ID: 1EXXXB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.93	Hours
Factors	1.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.85	Hours
Factors	4.33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.31	Hours
Factors	0.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.55	Hours
Factors	1.74							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	2.09							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.24	Hours
Factors	1.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.40	Hours
Factors	7.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	1.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.74	Hours
Factors	3.08							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.963.86	Dollars
Factors	1.015	-- FY00 Escalation --	5499.01	d				
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$24.18 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.
Basis for adjustment - Planning assumption

WBS No: 1EFB04
Activity ID: 1EXXB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	3.46	Hours
Factors	3.89 h							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.60	Hours
Factors	2.92 h							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.39	Hours
Factors	0.44 h							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.17	Hours
Factors	0.19 h							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.13	Hours
Factors	0.15 h							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.02	Hours
Factors	0.02 h							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	25.64	Dollars
Factors	28.4 d		1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 107 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$53.44 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. This year is based on executing the same level of effort as in FY 99, with the exception of when a facility enters cold shutdown. During cold shutdown the facility maintenance budget is reduced to 10% of the normal budget.

Basis for adjustment - Planning assumption

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

WBS No: 1EFB04
Activity ID: 1EXXB0115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	74.37	Hours
Factors 83.62 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	55.77	Hours
Factors 62.71 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.51	Hours
Factors 9.57 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors 4.18 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors 3.14 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors 0.48 h								
						0.88934	ISYS 0614001.88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	551.54	Dollars
Factors 1.015 -- FY00 Escalation -- 611 d								
						0.88934	ISYS 0614001.88934200 - Svsstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	1.377.42	Dollars
Factors 1377.42 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	563.50	Dollars
Factors 563.503 Dollars								

WBS No: 1EFB05 Title: 663 Cluster Landlord

Activity ID: 1EFB0165 Description: 663 Cluster Landlord Functions, FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.70	each	HC	379	265	5.718	1.524	0	7.242	2.790	10.033
3	Preventive maintenance	0.70	each	HC	64	45	980	169	0	1.149	478	1.627
Total for Activity 1EFB0165:						310	6.698	1.694	0	8.391	3.268	11.660

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 82 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance

WBS No: 1EFB05
Activity ID: 1EFB0165

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Units - Work Packages
Unit Cost - \$334.17 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	26.51	Hours
Factors	52.94	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	16.31	Hours
Factors	32.57	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	24.47	Hours
Factors	48.86	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	39.42	Hours
Factors	78.71	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	33.76	Hours
Factors	67.41	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	8.16	Hours
Factors	16.29	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	35.35	Hours
Factors	70.58	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	13.60	Hours
Factors	27.15	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	16.31	Hours
Factors	32.57	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers		Linear	2.72	Hours
Factors	5.43	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	27.86	Hours
Factors	55.64	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	16.31	Hours
Factors	32.57	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448	- Target

WBS No: 1EFB05
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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.83	Hours
Factors	17.64	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.20	Hours
Factors	112.22	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.88	Hours
Factors	21.72	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	24.02	Hours
Factors	47.96	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.22	Hours
Factors	2.44	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.33	Hours
Factors	2.65	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.82	Hours
Factors	1.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	3.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.97	Hours
Factors	3.94	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.41	Hours
Factors	0.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.69	Hours
Factors	3.37	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.82	Hours
Factors	1.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.68	Hours
Factors	1.36	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.82	Hours
Factors	1.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.39	Hours
Factors	2.78	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.55	Hours
Factors	1.09	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB05
Activity ID: 1EFB0165

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.88	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.81	Hours
Factors	5.61	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	2.4	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2.177.83	Dollars
Factors	1.015	-- FY00 Escalation --	4284.57	d	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 141 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.60 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	32.63	Hours
Factors	65.15	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
Factors	48.86	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.74	Hours
Factors	7.46	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.63	Hours
Factors	3.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB05
Activity ID: 1EFB0165

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.22	Hours
Factors	2.44	h	0.3612	May 2000 Earned Value Factor				

1.38645 [SYS 061300] 1.386448 - Target

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.37	h	0.3612	May 2000 Earned Value Factor				

1.38645 [SYS 061300] 1.386448 - Target

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	241.98	Dollars
Factors	476.06	d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0170 Description: 663 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.70	each	HC	673	471	10.154	2.707	0	12.862	4.844	17.705
3	Preventive maintenance	0.70	each	HC	113	79	1.740	301	0	2.041	830	2.871
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.088	1.088	0	1.088
Total for Activity 1EFB0170:						550	11.894	3.008	1.088	15.991	5.674	21.664

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$334.17 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.08	Hours

Factors 52.94 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.45	Hours
Factors	48.86	h						

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EFB05
Activity ID: 1EFB0170

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.97	Hours
Factors	32.57							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.95	Hours
Factors	67.41							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	70.00	Hours
Factors	78.71							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.49	Hours
Factors	16.29							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.77	Hours
Factors	70.58							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.15	Hours
Factors	27.15							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.97	Hours
Factors	32.57							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.83	Hours
Factors	5.43							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	49.48	Hours
Factors	55.64							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.97	Hours
Factors	32.57							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.32	Hours
Factors	21.72							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.69	Hours
Factors	17.64							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.80	Hours
Factors	112.22							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.65	Hours
Factors	47.96							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB05
Activity ID: 1EFB0170

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.00	Hours
Factors	3.37	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.50	Hours
Factors	3.94	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.14	Hours
Factors	3.53	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.21	Hours
Factors	1.36	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.47	Hours
Factors	2.78	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.99	Hours
Factors	5.61	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.4	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.867.60	Dollars
Factors	1.015	-- FY00 Escalation --	4284.57	d				
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 141 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance

WBS No: 1EFB05
Activity ID: 1EFB0170

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.60 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.94	Hours
Factors 65.15 h								
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.45	Hours
Factors 48.86 h								
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.63	Hours
Factors 7.46 h								
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.90	Hours
Factors 3.26 h								
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors 2.44 h								
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors 0.37 h								
						0.88934	[SYS 061400] .88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	429.73	Dollars
Factors 1.015 -- FY00 Escalation -- 476.06 d								
						0.88934	[SYS 061400] .88934200 - Svstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	655.80	Dollars
Factors 655.803 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	432.66	Dollars
Factors 432.665 Dollars								

Activity ID: 1EFB0175 Description: 663 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.70	each	HC	673	471	10.154	2.707	0	12.862	3.584	16.446
3	Preventive maintenance	0.70	each	HC	113	79	1.740	301	0	2.041	614	2.655
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	2.848	2.848	0	2.848
Total for Activity 1EFB0175:						550	11.894	3.008	2.848	17.750	4.199	21.949

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for

WBS No: 1EFB05
Activity ID: 1EFB0175

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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Baseline Devl
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Starts In FY *

the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 82 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$334.17 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.45	Hours
Factors	48.86	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.08	Hours
Factors	52.94	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.97	Hours
Factors	32.57	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.77	Hours
Factors	70.58	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	70.00	Hours
Factors	78.71	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.49	Hours
Factors	16.29	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.95	Hours
Factors	67.41	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.97	Hours
Factors	32.57	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.83	Hours
Factors	5.43	h						
0.88934 ISYS 0614001 .88934200 - Svstem								

WBS No: 1EFB05
Activity ID: 1EFB0175

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.15	Hours
Factors	27.15							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.97	Hours
Factors	32.57							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	49.48	Hours
Factors	55.64							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.80	Hours
Factors	112.22							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.69	Hours
Factors	17.64							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.32	Hours
Factors	21.72							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.65	Hours
Factors	47.96							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.00	Hours
Factors	3.37							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.50	Hours
Factors	3.94							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.14	Hours
Factors	3.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.21	Hours
Factors	1.36							
0.88934 [SYS 061400] .88934200 - System								

WBS No: 1EFB05
Activity ID: 1EFB0175

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.47	Hours
Factors	2.78	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.99	Hours
Factors	5.61	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.4	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.867.60	Dollars
Factors	4284.57	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 141 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.60 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 70% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.94	Hours
Factors	65.15	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.45	Hours
Factors	48.86	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB05
Activity ID: 1EFB0175

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.63	Hours
Factors	7.46	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.90	Hours
Factors	3.26	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.37	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	429.73	Dollars
Factors	476.06	d	1.015 -- FY00 Escalation --					
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1.954.93	Dollars
Factors	1954.93	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	892.62	Dollars
Factors	892.617	Dollars			

Activity ID: 1EFB0180

Description: 663 Cluster Cold Shutdown FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	82	82	1.771	466	0	2.236	600	2.837
3	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	103	459
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	801	801	0	801
Total for Activity 1EFB0180:						96	2.075	517	801	3.393	703	4.096

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$209.25 average for this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%

WBS No: 1EFB05
Activity ID: 1EFB0180

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
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Starts In FY *

Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
Factors	6.47	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.67	Hours
Factors	8.62	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.33	Hours
Factors	8.24	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.56	Hours
Factors	9.62	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors	0.66	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
Factors	3.32	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.05	Hours
Factors	6.8	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors	2.16	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86	h		0.88934 [SYS 061400] .88934200 - System				
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99	h		0.88934 [SYS 061400] .88934200 - System				

WBS No: 1EFB05
Activity ID: 1EFB0180

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
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Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	465.54	Dollars
Factors	523.47	d						
						0.88934 [SYS 061400] .88934200 - System		

Line Item 3 - Preventive maintenance

BOE	Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to
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WBS No: 1EFB05
Activity ID: 1EFB0180

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$30.28 average in this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.08	Hours
Factors 7.96 h		0.88934 [SYS 061400] .88934200 - Ssystem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	5.31	Hours
Factors 5.97 h		0.88934 [SYS 061400] .88934200 - Ssystem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.81	Hours
Factors 0.91 h		0.88934 [SYS 061400] .88934200 - Ssystem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.36	Hours
Factors 0.4 h		0.88934 [SYS 061400] .88934200 - Ssystem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.27	Hours
Factors 0.3 h		0.88934 [SYS 061400] .88934200 - Ssystem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.04	Hours
Factors 0.05 h		0.88934 [SYS 061400] .88934200 - Ssystem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	51.72	Dollars
Factors 58.16 d		0.88934 [SYS 061400] .88934200 - Ssystem						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	541.81	Dollars
Factors 541.808 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	259.43	Dollars
Factors 259.429 Dollars								

WBS No: 1EFB06
Activity ID: 1EFB0185

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

WBS No:	1EFB06	Title:	903 Area Cluster Landlord									
Activity ID:	1EFB0185	Description:	903 Area Cluster Landlord Functions, FY01									
				Cost Risk	1	Schedule Risk	1					
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
01 - tJ3GE011005	landlord support	1.00	each	HC	3.044	3.044	80.166	41.489	0	121.656	38.239	159.895
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	8.458	8.458	0	8.458
Total for Activity 1EFB0185:						3.044	80.166	41.489	8.458	130.114	38.239	168.353

Line Item 01 - tJ3GE011005 - landlord support

BOE

Historical Data Source:
WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Item Desc:
Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.

Breakdown of Historical Cost Data:
Item: Operate 903/ 905 Contractor Yard
Units: 1 Lot

Unit Cost:
Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies
Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase
74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:
1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2.Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	88.93	Hours
Factors 100 HOURS								
0.88934 [SYS 061400] .88934200 - System							206.77	Hours
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	206.77	Hours
Factors 232.5 hours								
0.88934 [SYS 061400] .88934200 - System							2,676.92	Hours
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,676.92	Hours
Factors 3010 hours								
0.88934 [SYS 061400] .88934200 - System							71.15	Hours
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	R100S	RMRS Salaried	Bell Shaped	71.15	Hours
Factors 80 h								
0.88934 [SYS 061400] .88934200 - System							1,805.36	Dollars
A5C	SUPPLIES	S030	GEOLOGISTS	R100S	RMRS Salaried	Linear	1,805.36	Dollars
Factors 2000 DOLLARS 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								

WBS No: 1EFB06
Activity ID: 1EFB0185

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	34.891.78	Dollars
Factors	38357.6 d	1.02283	-- FY00 Escalation --					
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	2.972.91	Dollars
Factors	3268.21 p&i support	1.02283	-- FY00 Escalation --					
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	1.819.29	Dollars
Factors	2000 dollars	1.02283	-- FY00 Escalation --					
						0.88934	[SYS 061400] .88934200 - Svstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	5.096.24	Dollars
Factors	5096.24 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3.362.23	Dollars
Factors	3362.23 Dollars							

Activity ID: 1EFB0190 Description: 903 Area Cluster Landlord Functions, FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
01 - tJ3GE0110A	landlord support	1.00	each	HC	3.818	3.818	98.679	12.189	0	110.868	48.155	159.023
Total for Activity 1EFB0190:						3.818	98.679	12.189	0	110.868	48.155	159.023

Line Item 01 - tJ3GE0110AC - landlord support

BOE

Historical Data Source:
WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Item Desc:
Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.

Breakdown of Historical Cost Data:
Item: Operate 903/ 905 Contractor Yard
Units: 1 Lot

Unit Cost:
Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies
Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase
74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:
1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2.Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	93.45	Hours
Factors	100	HOURS	0.67401 January 2000 Earned Value Factor						
							1.38645	[SYS 061300] 1.386448 - Target	

WBS No: 1EFB06
Activity ID: 1EFB0190

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Alternate Linear	507.42	Hours
Factors	543 hours		0.67401 January 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	93.45	Hours
Factors	100 HOURS		0.67401 January 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	93.45	Hours
Factors	100 HOURS		0.67401 January 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	217.27	Hours
Factors	232.5 hours		0.67401 January 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,719.33	Hours
Factors	2910 hours		0.67401 January 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	R100S	RMRS Salaried	Bell Shaped	93.28	Hours
Factors	80 h		0.84101 January 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	S030	GEOLOGISTS	R100S	RMRS Salaried	Linear	1,896.99	Dollars
Factors	2000 DOLLARS		1.015 -- FY00 Escalation --	0.67401 January 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	5,256.97	Dollars
Factors	5500 d		1.02283 -- FY00 Escalation --	0.67401 January 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	3,123.80	Dollars
Factors	3268.21 p&i support		1.02283 -- FY00 Escalation --	0.67401 January 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	1,911.62	Dollars
Factors	2000 dollars		1.02283 -- FY00 Escalation --	0.67401 January 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	

Activity ID: 1EFB0195

Description: 903 Area Cluster Landlord Functions, FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
01 - tJ3GE0110A	landlord support	1.00	each	HC	3.616	3.616	111.337	11.601	0	122.938	39.302	162.240
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	24.186	24.186	0	24.186
Total for Activity 1EFB0195:						3.616	111.337	11.601	24.186	147.124	39.302	186.426

Line Item 01 - tJ3GE0110AD - landlord support

BOE	<p>Historical Data Source: WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)</p> <p>Item Desc: Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.</p> <p>Breakdown of Historical Cost Data: Item: Operate 903/ 905 Contractor Yard Units: 1 Lot</p> <p>Unit Cost: Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies</p> <p>Unit Cost Adjustment Factor: 11.6% percent labor increase</p>
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WBS No: 1EFB06
Activity ID: 1EFB0195

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:

1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2.Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	88.93	Hours
Factors	100 HOURS							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	88.93	Hours
Factors	100 HOURS							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Alternate Linear	482.91	Hours
Factors	543 hours							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	88.93	Hours
Factors	100 HOURS							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	206.77	Hours
Factors	232.5 hours							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,587.99	Hours
Factors	2910 hours							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	R100S	RMRS Salaried	Bell Shaped	71.15	Hours
Factors	80 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
A5C	SUPPLIES	S030	GEOLOGISTS	R100S	RMRS Salaried	Linear	1,805.36	Dollars
Factors	2000 DOLLARS		1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200	- Svstem
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	5,003.05	Dollars
Factors	5500 d		1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200	- Svstem
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	2,972.91	Dollars
Factors	3268.21 p&i support		1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200	- Svstem
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	1,819.29	Dollars
Factors	2000 dollars		1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200	- Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16,604.73	Dollars
Factors	16604.7 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7,581.70	Dollars
Factors	7581.7 Dollars							

Activity ID: 1EFB0200 Description: 903 Area Cluster Landlord Functions, FY03

Cost Risk 1 Schedule Risk 1

WBS No: 1EFB06
Activity ID: 1EFB0200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
01 - tJ3GE0110AE	landlord support	1.00	each	HC	3.616	3.616	111.337	11.601	0	122.938	38.523	161.460
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	44.652	44.652	0	44.652
Total for Activity 1EFB0200:						3.616	111.337	11.601	44.652	167.590	38.523	206.113

Line Item 01 - tJ3GE0110AE - landlord support

BOE

Historical Data Source:
WAD number 83, 1.1.03.12.01, FY98 WADLET "Sep98" Spending Variance Reports "002a" located in the Planning & Intergration Reporting System. (Please note that actual costs were not collected at the line item level.)

Item Desc:
Support for landlord functions, Conduct of Operations, Plan of the Day, radio communication with field activities and support of the contractor field activities. Property management and inventory of controlled items will be maintained. Maintenance and repair of the buildings will be provided by CSS and is not scoped or funded in this activity. This line item represents 100% of the labor hours and approximately 100% of the subcontract and supplies for the WADLet.

Breakdown of Historical Cost Data:
Item: Operate 903/ 905 Contractor Yard
Units: 1 Lot

Unit Cost:
Wadlet - 3,644 Hours, \$49,722 Subcontracts and Supplies
Line Item - 3,644 Hours, \$49,722 Subcontracts and Supplies

Unit Cost Adjustment Factor: 11.6% percent labor increase
74.4% Subcontract and Supplies decrease

Revised Unit Cost: 4,066 Hours, \$12,768 Subcontract and Supplies

Basis for adjustment:
1. Hours have been increased by approximately 11.6 percent due to additional support requirements necessary to properly provide oversight for the trailers and storage lockers in the yard.

2.Subcontract and supplies, a major portion of the reduction is due to Programmatic Support in FY99 being added as an additional line item. The operation of the contractor yard is attempting to provide more managerial and physical types of support and thus utilizing less supplies to meet objectives.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	88.93	Hours
Factors 100 HOURS		0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	88.93	Hours
Factors 100 HOURS		0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Alternate Linear	482.91	Hours
Factors 543 hours		0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	88.93	Hours
Factors 100 HOURS		0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	206.77	Hours
Factors 232.5 hours		0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,587.99	Hours
Factors 2910 hours		0.88934 [SYS 061400] .88934200 - System						

WBS No: 1EFB06
Activity ID: 1EFB0200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	R100S	RMRS Salaried	Bell Shaped	71.15	Hours
Factors	80 h							
A5C	SUPPLIES	S030	GEOLOGISTS	R100S	RMRS Salaried	Linear	1.805.36	Dollars
Factors	2000 DOLLARS	1.015	-- FY00 Escalation --					
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	5.003.05	Dollars
Factors	5500 d	1.02283	-- FY00 Escalation --					
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	2.972.91	Dollars
Factors	3268.21 p&i support	1.02283	-- FY00 Escalation --					
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	1.819.29	Dollars
Factors	2000 dollars	1.02283	-- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								
0.88934 [SYS 061400] .88934200 - Svsstem								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	32.270.72
Factors	32270.7 Dollars				
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	12.381.63
Factors	12381.6 Dollars				

WBS No: 1EFB07	Title: East Sewage Trtmnt Cluster Landlord
Activity ID: 1EFB0205	Description: East Sewage Trtmnt Cluster L/L Functions, FY00

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
001	Landlord functions (Interceptor Trench,PU&D,Teller	1.00	ea	HC	180	180	9.636	16.903	0	26.539	4.702	31.242
002	CLEANUP	1.00	each	HC	187	187	4.965	25.807	0	30.771	2.423	33.194
JBCCER0001a	Perform Landlord Support Functions	1.00	ea	HC	527	527	11.943	15.855	0	27.799	5.828	33.627
JBCEER0001b	H20SIZ Cluster Landlord	1.00	ls	EE	115	115	2.788	210	0	2.999	1.361	4.360
SSL1c	Sanitary Sewer Collection System	1.00	each	EE	546	546	11.797	0	0	11.797	5.757	17.554
Total for Activity 1EFB0205:						1.555	41.129	58.776	0	99.905	20.071	119.976

Line Item 001 - Landlord functions (Interceptor Trench,PU&D,Teller

BOE

Historical Data Source: The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.
Item Desc: Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.
Historical Data Source - Item Desc - Breakdown of Historical Data: Item - Landlord Support Units - 1 lot Unit Cost - NA Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for adjustment - NA
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB07
Activity ID: 1EFB0205

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	180.28	Hours
Factors	360	Hours	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	14.342.10	Dollars
Factors	28000	Dollars	1.02283	-- FY00 Escalation --	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	2,561.09	Dollars
Factors	5000	Dollars	1.02283	-- FY00 Escalation --	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 002 - CLEANUP

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -
Item Desc -
Breakdown of Historical Data:
Item - Landlord Support
Units - 1 lot
Unit Cost - NA
Unit Cost Adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	18.69	Hours
Factors	20	HOURS	0.67401	January 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	R100S	RMRS Salaried	Linear	168.21	Hours
Factors	180	HOURS	0.67401	January 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	25.806.93	Dollars
Factors	27000	DOLLARS	1.02283	-- FY00 Escalation --	0.67401	January 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item IBCER0001a - Perform Landlord Support Functions

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:
1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:
Item:
1. ER Project (R217S)
Environmental Engineer (Inspection, verification and reporting - 1 manager x60 hrs)
2. ER Project (R217S)
PROJECT MANAGEMENT Coordination, IWCP, PODS - 1 manager x75hrs)
3. Leased Labor Maintenance (213H)

WBS No: 1EFB07
Activity ID: 1EFB0205

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 kwh x 37,500 kwh).
4. Leased Labor Maintenance (213H)
Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal).
5. Leased Labor Maintenance (213H)
Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal).
6. Leased Labor Maintenance (213H)
Landlord support activities A5C supplies \$ 6,000.00 dollars.

Unit Cost Adjustment factor:

- 1) NA
- 2) NA
- 3) NA
- 4) NA
- 5) NA
- 6) NA

Basis for adjustment:

- 1) NA
- 2) NA
- 3) NA
- 4) NA
- 5) NA
- 6) NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs	Steelworkers	Linear	81.13	Hours
Factors	162	Hours	0.3612	May 2000	Earned Value Factor		1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS	Salaried	Linear	30.05	Hours
Factors	60	Hours	0.3612	May 2000	Earned Value Factor		1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I /CBLFAB.DSP.	KE10H	Indust/Site Srvs	Steelworkers	Linear	54.08	Hours
Factors	108	Hours	0.3612	May 2000	Earned Value Factor		1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	KE10H	Indust/Site Srvs	Steelworkers	Linear	324.51	Hours
Factors	648	Hours	0.3612	May 2000	Earned Value Factor		1.38645	ISYS 0613001	1.386448 - Target
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS	Salaried	Linear	37.56	Hours
Factors	75	Hours	0.3612	May 2000	Earned Value Factor		1.38645	ISYS 0613001	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C211S	Electrical	Maintenance	Linear	3.049.78	Dollars
Factors	6000	Dollars	1.015	-- FY00	Escalation --	0.3612	May 2000	Earned Value Factor	1.38645 ISYS 0613001 1.386448 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS	Salaried	Linear	12.805.45	Dollars
Factors	25000	Dollars	1.02283	-- FY00	Escalation --	0.3612	May 2000	Earned Value Factor	1.38645 ISYS 0613001 1.386448 - Target

Line Item IBCEER0001b - H20SIZ Cluster Landlord

BOE

BOE NARRATIVE:
1. PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 3 days x 9 hrs) + (\$0.08 kwh x 12,500 kwh).
2. CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 9 hrs x 2 events)+(1 labor x 9 hrs x 2 events)+(200 gal x \$1.00/gal).
3. SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 9 hrs x 8 events)+(1 labor x 9 hrs x 8 events) + (800 gal x \$1.00/gal).

WBS No: 1EFB07
Activity ID: 1EFB0205

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

4. PROJECT MANAGEMENT AND (Coordination,IWCP,PODs - 1 manager x25hrs)
5. Environmental Engineer (Inspection, verification and reporting - 1 manager x20 hrs)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	27.04	Hours
Factors	54	Hours	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	10.02	Hours
Factors	20	Hours	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		L050	MISSION SUP SPEC I / CBL FAB.DSP	KE10H	Indust/Site Srvs Steelworkers	Linear	45.07	Hours
Factors	90	Hours	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	12.52	Hours
Factors	25	Hours	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers	Linear	20.03	Hours
Factors	40	Hours	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
A5C	SUPPLIES		0000	NONE	R100S	RMRS Salaried	Linear	210.43	Dollars
Factors	414	Dollars	1.015	-- FY00 Escalation --		0.3612	Mav 2000 Earned Value Factor		
							1.38645 [SYS 061300] 1.386448 - Target		

Line Item SSL1c - Sanitary Sewer Collection System

BOE

Estimators Experience - Frank Huffman has approximately twenty years experience in the operations of Sewage Treatment Plants. Plant experience equals ten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.

Experience Item Desc - Sewage Treatment Plant Operations

Breakdown of Cost Data:
Item - Plant Sewer Lines Evalution
Units - 1 Lot
Unit Cost - \$ 45K
Unit Cost Adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	R100S	RMRS Salaried	Linear	51.08	Hours
Factors	102 Hours	0.3612	May 2000 Earned Value Factor					
1.38645 [SYS 061300] 1.386448 - Target								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	332.27	Hours
Factors	663.5 Hours	0.3612	May 2000 Earned Value Factor					
1.38645 [SYS 061300] 1.386448 - Target								
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KE10H	Indust/Site Srvs Steelworkers	Linear	162.76	Hours
Factors	325 Hours	0.3612	May 2000 Earned Value Factor					
1.38645 [SYS 061300] 1.386448 - Target								

Activity ID: 1EFB0210

Description: East Sewage Trtmnt Cluster L/L Functions, FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
001	Landlord functions (Interceptor Trench,PU&D,Teller	1.00	ea	HC	320	320	17.113	30.018	0	47.131	8.163	55.294
002	CLEANUP	1.00	each	HC	178	178	9.082	24.560	0	33.643	4.332	37.975
IBCCER0001a	Perform Landlord Support Functions	1.00	ea	HC	936	936	21.210	28.157	0	49.367	10.117	59.484
IBCEER0001b	H20SIZ Cluster Landlord	1.00	ls	EE	204	204	4.915	374	0	5.288	2.344	7.633

WBS No: 1EFB07
Activity ID: 1EFB0210

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

SSL1c	Sanitary Sewer Collection System	1.00	each	EE	970	970	20.661	0	0	20.661	9.855	30.516
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	10.099	10.099	0	10.099
Total for Activity 1EFB0210:						2,608	72,980	83,110	10,099	166,189	34,812	201,000

Line Item 001 - Landlord functions (Interceptor Trench,PU&D,Teller

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -
Item Desc -
Breakdown of Historical Data:
Item - Landlord Support
Units - 1 lot
Unit Cost - NA
Unit Cost Adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	320.16	Hours
Factors 360 Hours								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	4,548.23	Dollars
Factors 5000 Dollars 1.02283 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	25,470.08	Dollars
Factors 28000 Dollars 1.02283 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								

Line Item 002 - CLEANUP

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -
Item Desc -
Breakdown of Historical Data:
Item - Landlord Support
Units - 1 lot
Unit Cost - NA
Unit Cost Adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
Factors 20 HOURS								

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EFB07
Activity ID: 1EFB0210

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	160.08	Hours
Factors	180 HOURS							
						0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	24.560.43	Dollars
Factors	27000 DOLLARS		1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item IBC CER0001a - Perform Landlord Support Functions

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:
1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:
Item:
1. ER Project (R217S)
Environmental Engineer (Inspection, verification and reporting - 1 manager x60 hrs)
2. ER Project (R217S)
PROJECT MANAGEMENT Coordination, IWCP, PODs - 1 manager x75hrs)
3. Leased Labor Maintenance (213H)
Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 kwh x 37,500 kwh).
4. Leased Labor Maintenance (213H)
Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal).
5. Leased Labor Maintenance (213H)
Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal).
6. Leased Labor Maintenance (213H)
Landlord support activities A5C supplies \$ 6,000.00 dollars.

Unit Cost Adjustment factor:
1) NA
2) NA
3) NA
4) NA
5) NA
6) NA

Basis for adjustment:
1) NA
2) NA
3) NA
4) NA
5) NA
6) NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	144.07	Hours
Factors	162	Hours	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	53.36	Hours
Factors	60	Hours							

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EFB07
Activity ID: 1EFB0210

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	96.05	Hours
Factors	108	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C211S	Electrical Maintenance	Linear	576.29	Hours
Factors	648	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	66.70	Hours
Factors	75	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C211S	Electrical Maintenance	Linear	5.416.09	Dollars
Factors	6000	Dollars	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200 - Svsstem	
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	22.741.14	Dollars
Factors	25000	Dollars	1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200 - Svsstem	

Line Item IBCEER0001b - H20SIZ Cluster Landlord

BOE

BOE NARRATIVE:
1. PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 3 days x 9 hrs) + (\$0.08 kwh x 12,500 kwh).
2. CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 9 hrs x 2 events)+(1 labor x 9 hrs x 2 events)+(200 gal x \$1.00/gal).
3. SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 9 hrs x 8 events)+(1 labor x 9 hrs x 8 events) + (800 gal x \$1.00/gal).
4. PROJECT MANAGEMENT AND (Coordination,IWCP,PODs - 1 manager x25hrs)
5. Environmental Engineer (Inspection, verification and reporting - 1 manager x20 hrs)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	48.02	Hours
Factors	54	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
Factors	20	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	80.04	Hours
Factors	90	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	R100S	RMRS Salaried	Linear	35.57	Hours
Factors	40	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	22.23	Hours
Factors	25	Hours						
						0.88934 [SYS 061400]	.88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	373.71	Dollars
Factors	414	Dollars	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400]	.88934200 - Svsstem	

Line Item SSL1c - Sanitary Sewer Collection System

BOE

Estimators Experience - Frank Huffman has approximately twenty one years experience in the operations of Sewage Treatment Plants. Plant experience equals ten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.

Experience Item Desc - Sewage Treatment Plant Operations

Breakdown of Cost Data:
Item - Sewer Lines Inspection PA Zone Buildings
Units - 1 Lot
Unit Cost - \$ 45K
Unit Cost Adjustment factor - NA

WBS No: 1EFB07
Activity ID: 1EFB0215

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

Revised Unit Cost - NA
Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		R070	WASTE TREATMENT OPERATOR A		R100S	RMRS Salaried	Linear	590.08	Hours
Factors 663.5 Hours											
									0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC		R100S	RMRS Salaried	Linear	289.04	Hours	
Factors 325 Hours											
									0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC		R100S	RMRS Salaried	Linear	90.71	Hours	
Factors 102 Hours											
									0.88934	[SYS 061400] .88934200 - System	

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	6.084.49	Dollars
Factors		6084.49	Dollars				
	ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	4.014.23	Dollars
Factors		4014.23	Dollars				

Activity ID: 1EFB0215 Description: East Sewage Trtmt Cluster L/L Functions, FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
001	Landlord functions (Interceptor Trench,PU&D,Teller	1.00	ea	HC	320	320	17.113	30.018	0	47.131	6.041	53.172
002	CLEANUP	1.00	each	HC	178	178	9.082	24.560	0	33.643	3.206	36.849
IBCCER0001a	Perform Landlord Support Functions	1.00	ea	HC	936	936	21.210	28.157	0	49.367	7.487	56.854
IBCEER0001b	H20SIZ Cluster Landlord	1.00	ls	EE	204	204	4.915	374	0	5.288	1.735	7.023
SSL1c	Sanitary Sewer Collection System	1.00	each	EE	970	970	20.661	0	0	20.661	7.293	27.954
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27.110	27.110	0	27.110
Total for Activity 1EFB0215:						2.608	72.980	83.110	27.110	183.200	25.762	208.962

Line Item 001 - Landlord functions (Interceptor Trench,PU&D,Teller

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
BOE		Historical Data Source: The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats. Item Desc: Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews. Historical Data Source - Item Desc - Breakdown of Historical Data: Item - Landlord Support Units - 1 lot Unit Cost - NA Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for adjustment - NA This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.					

WBS No: 1EFB07
Activity ID: 1EFB0215

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	320.16	Hours
Factors	360	Hours						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	4.548.23	Dollars
Factors	5000	Dollars	1.02283	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	25.470.08	Dollars
Factors	28000	Dollars	1.02283	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 002 - CLEANUP

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.

Historical Data Source -
Item Desc -
Breakdown of Historical Data:
Item - Landlord Support
Units - 1 lot
Unit Cost - NA
Unit Cost Adjustment factor - NA
Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
Factors	20	HOURS						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	160.08	Hours
Factors	180	HOURS						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	24.560.43	Dollars
Factors	27000	DOLLARS	1.02283	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item IBCCE0001a - Perform Landlord Support Functions

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:
1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:
Item:
1. ER Project (R217S)
Environmental Engineer (Inspection, verification and reporting - 1 manager x60 hrs)
2. ER Project (R217S)
PROJECT MANAGEMENT Coordination, IWCP, PODS - 1 manager x75hrs)
3. Leased Labor Maintenance (213H)

WBS No: 1EFB07
Activity ID: 1EFB0215

Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 kwh x 37,500 kwh).
4. Leased Labor Maintenance (213H)
Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal).
5. Leased Labor Maintenance (213H)
Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal).
6. Leased Labor Maintenance (213H)
Landlord support activities A5C supplies \$ 6,000.00 dollars.

Unit Cost Adjustment factor:

- 1) NA
- 2) NA
- 3) NA
- 4) NA
- 5) NA
- 6) NA

Basis for adjustment:

- 1) NA
- 2) NA
- 3) NA
- 4) NA
- 5) NA
- 6) NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	144.07	Hours
Factors	162	Hours						
						0.88934 ISYS 0614001 .88934200 - Svstem		
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	53.36	Hours
Factors	60	Hours						
						0.88934 ISYS 0614001 .88934200 - Svstem		
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	96.05	Hours
Factors	108	Hours						
						0.88934 ISYS 0614001 .88934200 - Svstem		
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C211S	Electrical Maintenance	Linear	576.29	Hours
Factors	648	Hours						
						0.88934 ISYS 0614001 .88934200 - Svstem		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	66.70	Hours
Factors	75	Hours						
						0.88934 ISYS 0614001 .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C211S	Electrical Maintenance	Linear	5.416.09	Dollars
Factors	6000	Dollars	1.015 -- FY00 Escalation --					
						0.88934 ISYS 0614001 .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	22.741.14	Dollars
Factors	25000	Dollars	1.02283 -- FY00 Escalation --					
						0.88934 ISYS 0614001 .88934200 - Svstem		

Line Item IBCEER0001b - H20SIZ Cluster Landlord

BOE

BOE NARRATIVE:
1. PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 3 days x 9 hrs) + (\$0.08 kwh x 12,500 kwh).
2. CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 9 hrs x 2 events)+(1 labor x 9 hrs x 2 events)+(200 gal x \$1.00/gal).
3. SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 9 hrs x 8 events)+(1 labor x 9 hrs x 8 events) + (800 gal x \$1.00/gal).

WBS No: 1EFB07
Activity ID: 1EFB0215

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

4. PROJECT MANAGEMENT AND (Coordination,IWCP,PODs - 1 manager x25hrs)
5. Environmental Engineer (Inspection, verification and reporting - 1 manager x20 hrs)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	48.02	Hours
Factors 54 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
Factors 20 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBL FAB.DSP.	C211S	Electrical Maintenance	Linear	80.04	Hours
Factors 90 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	R100S	RMRS Salaried	Linear	35.57	Hours
Factors 40 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	22.23	Hours
Factors 25 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	373.71	Dollars
Factors 414 Dollars		1.015 -- FY00 Escalation --						
		0.88934 [SYS 061400] .88934200 - Svstem						

Line Item SSL1c - Sanitary Sewer Collection System

BOE

Estimators Experience - Frank Huffman has approximately twenty two years experience in the operations of Sewage Treatment Plants. Plant experience equals ten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.

Experience Item Desc - Sewage Treatment Plant Operations

Breakdown of Cost Data:

Item - Sewer Lines Inspection Water Treatment Facilities

Units - 1 Lot

Unit Cost - \$ 45K

Unit Cost Adjustment factor - NA

Revised Unit Cost - NA

Basis for adjustment -NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	R100S	RMRS Salaried	Linear	590.08	Hours
Factors 663.5 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	289.04	Hours
Factors 325 Hours		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	90.71	Hours
Factors 102 Hours		0.88934 [SYS 061400] .88934200 - Svstem						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.611.96	Dollars
Factors 18612 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8.498.20	Dollars
Factors 8498.2 Dollars								

WBS No: 1EFB07
Activity ID: 1EFB0220

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * Starts In FY *

Activity ID: 1EFB0220 Description: East Sewage Trtmt Cluster L/L Functions, FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
001	Landlord functions (Interceptor Trench,PU&D,Teller	1.00	ea	HC	320	320	17.113	30.018	0	47.131	5.921	53.052
002	CLEANUP	1.00	each	HC	178	178	9.082	24.560	0	33.643	3.142	36.785
IBCCER0001a	Perform Landlord Support Functions	1.00	ea	HC	936	936	21.210	28.157	0	49.367	7.339	56.706
IBCEER0001b	H2OSIZ Cluster Landlord	1.00	ls	EE	204	204	4.915	374	0	5.288	1.700	6.989
SSL1c	Sanitary Sewer Collection System	1.00	each	EE	970	970	20.661	0	0	20.661	7.149	27.809
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	50.150	50.150	0	50.150
Total for Activity 1EFB0220:						2.608	72.980	83.110	50.150	206.240	25.251	231.491

Line Item 001 - Landlord functions (Interceptor Trench,PU&D,Teller

BOE	<p>Historical Data Source: The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.</p> <p>Item Desc: Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.</p> <p>Historical Data Source - Item Desc - Breakdown of Historical Data: Item - Landlord Support Units - 1 lot Unit Cost - NA Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for adjustment - NA</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	320.16 Hours
Factors	360	Hours				0.88934 [SYS 061400] .88934200 - System	
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	4.548.23 Dollars
Factors	5000	Dollars	1.02283 -- FY00 Escalation --			0.88934 [SYS 061400] .88934200 - System	
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	25.470.08 Dollars
Factors	28000	Dollars	1.02283 -- FY00 Escalation --			0.88934 [SYS 061400] .88934200 - System	

Line Item 002 - CLEANUP

BOE	<p>Historical Data Source: The historical data is the FY98 Work Plan and similar actual costs through September 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.</p> <p>Item Desc: Based on the number of subcontract dollars and project management hours used to achieve the FY00 scope. Project costs include A5H costs to remove materials and decontaminate as necessary, costs for transporting materials to the PU&D yard or other designated disposal or storage area, project manager's hours for subcontractor oversight, and for performing PPRs and project and Budget reviews.</p> <p>Historical Data Source - Item Desc - Breakdown of Historical Data: Item - Landlord Support Units - 1 lot Unit Cost - NA Unit Cost Adjustment factor - NA</p>
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WBS No: 1EFB07
Activity ID: 1EFB0220

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter * *Starts In FY* *

Revised Unit Cost - NA
Basis for adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
<i>Factors</i> 20 HOURS								
		0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	160.08	Hours
<i>Factors</i> 180 HOURS								
		0.88934 [SYS 061400] .88934200 - System						
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	24.560.43	Dollars
<i>Factors</i> 27000 DOLLARS		1.02283 -- FY00 Escalation --						
		0.88934 [SYS 061400] .88934200 - System						

Line Item IBC CER0001a - Perform Landlord Support Functions

BOE

Historical Data Source:
The historical data is the FY98 Work Plan and the actual costs through April 1998. The FY98 Work Plan was based on previous years experience for the same activities at Rocky Flats.

Item Desc:
THE LANDLORD FUNCTIONS ASSOCIATED WITH MAINTAINING THE RFETS OUTER BUFFER ZONE (SBZ) AND CONTINUING ROUTINE NPDES STORM WATER MONITORING OPERATIONS CONSISTS OF THE FOLLOWING ACTIVITIES IN FY98:
1. PROVIDE AND MAINTAIN ELECTRICAL POWER TO ESTABLISHED SAMPLING STATIONS,
2. MAINTAINING BUFFER ZONE FIRE BREAKS, AND
3. MAINTAINING ROADS TO PROVIDE DAILY ACCESS TO ENVIRONMENTAL MONITORING OPERATIONS.,

Breakdown of Historical Data:
Item:
1. ER Project (R217S)
Environmental Engineer (Inspection, verification and reporting - 1 manager x60 hrs)
2. ER Project (R217S)
PROJECT MANAGEMENT Coordination, IWCP, PODs - 1 manager x75hrs)
3. Leased Labor Maintenance (213H)
Electricians PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 9 days x 9 hrs) + (\$0.08 kwh x 37,500 kwh).
4. Leased Labor Maintenance (213H)
Heavy equipment operators SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 27 hrs x 8 events)+(1 labor x 27 hrs x 8 events) + (2400 gal x \$1.00/gal).
5. Leased Labor Maintenance (213H)
Mission Support Specialists CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 27 hrs x 2 events)+(1 labor x 27 hrs x 2 events)+(600 gal x \$1.00/gal).
6. Leased Labor Maintenance (213H)
Landlord support activities A5C supplies \$ 6,000.00 dollars.

Unit Cost Adjustment factor:
1) NA
2) NA
3) NA
4) NA
5) NA
6) NA

Basis for adjustment:
1) NA
2) NA
3) NA
4) NA
5) NA
6) NA

WBS No: 1EFB07
Activity ID: 1EFB0220

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	144.07	Hours
Factors	162	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	53.36	Hours
Factors	60	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	96.05	Hours
Factors	108	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C211S	Electrical Maintenance	Linear	576.29	Hours
Factors	648	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	66.70	Hours
Factors	75	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C211S	Electrical Maintenance	Linear	5,416.09	Dollars
Factors	6000	Dollars	1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001 .88934200 - Svstem								
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	22,741.14	Dollars
Factors	25000	Dollars	1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001 .88934200 - Svstem								

Line Item IBCEER0001b - H20SIZ Cluster Landlord

BOE

BOE NARRATIVE:
1. PROVIDE FOR ELECTRICITY, REPAIR AND MAINTENANCE OF POWER LINES TO ENVIRONMENTAL MONITORING STATIONS(2 electricians x 3 days x 9 hrs) + (\$0.08 kwh x 12,500 kwh).
2. CLEAR AND MAINTAIN FIRE BREAK ROADS 2 EVENTS PER YEAR(2 operators x 9 hrs x 2 events)+(1 labor x 9 hrs x 2 events)+(200 gal x \$1.00/gal).
3. SNOW PLOWING OF PRIMARY BUFFER ZONE ROADS DURING HEAVY SNOW FALLS, AND GRADING TO MAINTAIN ROAD SURFACES(2 operators x 9 hrs x 8 events)+(1 labor x 9 hrs x 8 events) + (800 gal x \$1.00/gal).
4. PROJECT MANAGEMENT AND (Coordination,IWCP,PODs - 1 manager x25hrs)
5. Environmental Engineer (Inspection, verification and reporting - 1 manager x20 hrs)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	48.02	Hours
Factors	54	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	17.79	Hours
Factors	20	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C211S	Electrical Maintenance	Linear	80.04	Hours
Factors	90	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	R100S	RMRS Salaried	Linear	35.57	Hours
Factors	40	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	22.23	Hours
Factors	25	Hours						
0.88934 ISYS 0614001 .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	373.71	Dollars
Factors	414	Dollars	1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001 .88934200 - Svstem								

WBS No: 1EFB07
Activity ID: 1EFB0220

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Line Item SSL1c - Sanitary Sewer Collection System

BOE	Estimators Experience - Frank Huffman has approximately twenty three years experience in the operations of Sewage Treatment Plants. Plant experience equals ten years. Local municipalities experience equals ten plus years. Backup information is located in B995, contact Mr. Frank Huffman extension 6290.									
	Experience Item Desc - Sewage Treatment Plant Operations									
	Breakdown of Cost Data:									
	Item - Sewer Lines Inspection Waste Treatment Facilities									
	Units - 1 Lot									
	Unit Cost - \$ 45K									
	Unit Cost Adjustment factor - NA									
	Revised Unit Cost - NA									
	Basis for adjustment -NA									
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.									

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		R070	WASTE TREATMENT OPERATOR A	R100S	RMRS Salaried	Linear	590.08	Hours
Factors	663.5	Hours								
								0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	90.71	Hours	
Factors	102	Hours								
								0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC	R100S	RMRS Salaried	Linear	289.04	Hours	
Factors	325	Hours								
								0.88934	[SYS 061400] .88934200 - System	

Line Item SYS - Contingency And Escalation

BOE Resources										
	<i>Cost Element</i>			<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	36.244.20	Dollars
	<i>Factors</i> 36244.2 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	13.906.18	Dollars
<i>Factors</i> 13906.2 Dollars										

WBS No:	1EFB08	Title:	Elect. Substa. Cluster Landlord									
Activity ID:	1EFB0290	Description:	Elect. Substa. Cluster Landlord Functions. FY00									
						Cost Risk		2		Schedule Risk		1
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	29	29	626	167	0	793	305	1,098
3	Preventive maintenance	1.00	each	HC	5	5	107	19	0	126	52	178
Total for Activity 1EFB0290:						34	733	186	0	919	358	1,276

Line Item 1 - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.											
	•Approximately 5 corrective/routine maintenance work actions are expected.											
	The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.											
	Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98											
	Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data:											

WBS No: 1EFB08
Activity ID: 1EFB0290

Rockv Flats Closure Project
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Project Baseline Devl
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Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$419.80 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.25	Hours
Factors	2.5 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.88	Hours
Factors	3.75 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.03	Hours
Factors	4.06 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.59	Hours
Factors	5.17 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.02	Hours
Factors	6.03 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.71	Hours
Factors	5.41 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.63	Hours
Factors	1.25 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.25	Hours
Factors	2.5 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.04	Hours
Factors	2.08 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.21	Hours
Factors	0.42 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.14	Hours
Factors	4.27 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.25	Hours
Factors	2.5 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				

WBS No: 1EFB08
Activity ID: 1EFB0290

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.31	Hours
Factors	8.6	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.83	Hours
Factors	1.66	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.68	Hours
Factors	1.35	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.84	Hours
Factors	3.68	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.19	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.06	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.3	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.21	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.08	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB08
Activity ID: 1EFB0290

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.07	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors	0.43	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	166.96	Dollars
Factors	328.47	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 11 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.09 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.50	Hours
Factors	4.99	h	0.3612 May 2000 Earned Value Factor						
							1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.88	Hours
Factors	3.75	h	0.3612 May 2000 Earned Value Factor						
							1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.29	Hours
Factors	0.57	h	0.3612 May 2000 Earned Value Factor						
							1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.13	Hours
Factors	0.25	h	0.3612 May 2000 Earned Value Factor						
							1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB08
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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.10	Hours
Factors	0.19	h	0.3612	May 2000 Earned Value Factor				
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.02	Hours
Factors	0.03	h	0.3612	May 2000 Earned Value Factor				
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	18.55	Dollars
Factors	36.5	d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0295 Description: Elect. Substa. Cluster Landlord Functions. FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	52	52	1,110	297	0	1,407	530	1,936
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	91	315
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	119	119	0	119
Total for Activity 1EFB0295:						60	1,301	329	119	1,749	621	2,370

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$419.80 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.22	Hours
Factors	2.5	h							
							0.88934	[SYS 061400] 88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.34	Hours
Factors	3.75	h							
							0.88934	[SYS 061400] 88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.61	Hours
Factors	4.06	h							
							0.88934	[SYS 061400] 88934200 - Svstem	

0.88934 [SYS 061400] 0.88934200 - System

WBS No: 1EFB08
Activity ID: 1EFB0295

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.36	Hours
Factors	6.03							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.60	Hours
Factors	5.17							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.37	Hours
Factors	0.42							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.85	Hours
Factors	2.08							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.80	Hours
Factors	4.27							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.65	Hours
Factors	8.6							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.27	Hours
Factors	3.68							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.11	Hours
Factors	1.25							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.23	Hours
Factors	0.26							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB08
Activity ID: 1EFB0295

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.16	Hours
Factors	0.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	296.50	Dollars
Factors	328.47	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.09 average in this cluster

WBS No: 1EFB08
Activity ID: 1EFB0295

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.44	Hours
Factors 4.99 h								
						0.88934 [SYS 061400] .88934200 - Ssystem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34	Hours
Factors 3.75 h								
						0.88934 [SYS 061400] .88934200 - Ssystem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.51	Hours
Factors 0.57 h								
						0.88934 [SYS 061400] .88934200 - Ssystem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors 0.25 h								
						0.88934 [SYS 061400] .88934200 - Ssystem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors 0.19 h								
						0.88934 [SYS 061400] .88934200 - Ssystem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors 0.03 h								
						0.88934 [SYS 061400] .88934200 - Ssystem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	32.95	Dollars
Factors 36.5 d 1.015 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - System		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	71.74	Dollars
Factors 71.7426 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	47.33	Dollars
Factors 47.3321 Dollars								

Activity ID: 1EFB0300

Description: Elect. Substa. Cluster Landlord Functions. FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	52	52	1,110	297	0	1,407	392	1,799
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	67	291
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	312	312	0	312
Total for Activity 1EFB0300:						60	1,301	329	312	1,942	459	2,401

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB08
Activity ID: 1EFB0300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$419.80 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.22	Hours
Factors 2.5 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.34	Hours
Factors 3.75 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.61	Hours
Factors 4.06 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.60	Hours
Factors 5.17 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.36	Hours
Factors 6.03 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.81	Hours
Factors 5.41 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.22	Hours
Factors 2.5 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.37	Hours
Factors 0.42 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.85	Hours
Factors 2.08 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.22	Hours
Factors 2.5 h								
						0.88934	[SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.80	Hours
Factors 4.27 h								
						0.88934	[SYS 061400] .88934200 - System	

WBS No: 1EFB08
Activity ID: 1EFB0300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.65	Hours
Factors	8.6	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.27	Hours
Factors	3.68	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	1.11	Hours
Factors	1.25	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.23	Hours
Factors	0.26	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KD10H	776 Complex Steelworkers	Linear	0.19	Hours
Factors	0.21	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB08
Activity ID: 1EFB0300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.16	Hours
Factors	0.18	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	296.50	Dollars
Factors	328.47	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.09 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.44	Hours
Factors	4.99	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34	Hours
Factors	3.75	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.51	Hours
Factors	0.57	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors	0.25	h						
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB08
Activity ID: 1EFB0300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors 0.19 h							0.88934	[SYS 061400] .88934200 - Svsystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors 0.03 h							0.88934	[SYS 061400] .88934200 - Svsystem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	32.95	Dollars
Factors 36.5 d 1.015 -- FY00 Escalation --							0.88934	[SYS 061400] .88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	213.87	Dollars
	Factors 213.866 Dollars								
Resources	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	97.65	Dollars
	Factors 97.6508 Dollars								

Activity ID: 1EFB0305 Description: Elect. Substa. Cluster Landlord Functions, FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	52	52	1.110	297	0	1.407	384	1.791
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	66	290
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	575	575	0	575
Total for Activity 1EFB0305:						60	1.301	329	575	2.206	450	2.656

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 5 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$419.80 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB08
Activity ID: 1EFB0305

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34	Hours
Factors	3.75	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.61	Hours
Factors	4.06	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.60	Hours
Factors	5.17	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.36	Hours
Factors	6.03	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	1.85	Hours
Factors	2.08	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.37	Hours
Factors	0.42	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.80	Hours
Factors	4.27	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.65	Hours
Factors	8.6	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.27	Hours
Factors	3.68	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.11	Hours
Factors	1.25	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.23	Hours
Factors	0.26	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.16	Hours
Factors	0.18	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	296.50	Dollars
Factors	328.47	d						
			1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

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in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$31.09 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.44	Hours

Factors 4.99 h

0.88934 ISYS 0614001.88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	3.34	Hours
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Factors 3.75 h

0.88934 ISYS 0614001.88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.51	Hours
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Factors 0.57 h

0.88934 ISYS 0614001.88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.22	Hours
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Factors 0.25 h

0.88934 ISYS 0614001.88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.17	Hours
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Factors 0.19 h

0.88934 ISYS 0614001.88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.03	Hours
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Factors 0.03 h

0.88934 ISYS 0614001.88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	32.95	Dollars
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Factors 36.5 d

1.015 -- FY00 Escalation --

0.88934 ISYS 0614001.88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	415.83	Dollars

Factors 415.827 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	159.54	Dollars
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Factors 159.544 Dollars

Activity ID: 1EFB0310 Description: Elect. Substa. Cluster Landlord Functions. FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	52	52	1.110	297	0	1.407	313	1.720
3	Preventive maintenance	1.00	each	HC	9	9	191	33	0	224	54	277

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SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	285	285	0	285
Total for Activity 1EFB0310:						60	1.301	329	285	1.915	367	2.282

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 5 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$419.80 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34	Hours
Factors	3.75	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.61	Hours
Factors	4.06	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.60	Hours
Factors	5.17	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.36	Hours
Factors	6.03	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.85	Hours
Factors	2.08	h						
0.88934 ISYS 0614001 .88934200 - Svstem								

WBS No: 1EFB08
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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.37	Hours
Factors	0.42							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	2.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.80	Hours
Factors	4.27							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.65	Hours
Factors	8.6							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.27	Hours
Factors	3.68							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.11	Hours
Factors	1.25							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.23	Hours
Factors	0.26							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
						0.88934	[SYS 061400]	.88934200 - Svstem

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751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.19	Hours
Factors	0.21	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.16	Hours
Factors	0.18	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.06	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	296.50	Dollars
Factors	328.47	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 11 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$31.09 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.44	Hours
Factors	4.99	h						
						0.88934	[SYS 061400] .88934200 - Svstem	

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.34	Hours
Factors	3.75	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.51	Hours
Factors	0.57	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors	0.25	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.19	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	32.95	Dollars
Factors	36.5	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	92.87	Dollars
Factors	92.8685	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	191.77	Dollars
Factors	191.768	Dollars						

WBS No: 1EFB09 Title: Misc. Buffer Zone Cluster Landlord

Activity ID: 1EFB0315 Description: Misc. Buffer Zone L/L Functions, FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	579	579	12.453	4.027	0	16.481	6.077	22.558
3	Preventive maintenance	1.00	each	HC	118	118	2.589	447	0	3.036	1.263	4.299
Total for Activity 1EFB0315:						697	15.042	4.475	0	19.517	7.340	26.857

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 166 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

WBS No: 1EFB09
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The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	45.25	Hours
Factors	90.36 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	49.02	Hours
Factors	97.89 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	30.17	Hours
Factors	60.24 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	15.08	Hours
Factors	30.12 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.77	Hours
Factors	9.52 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	62.42	Hours
Factors	124.65 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	12.30	Hours
Factors	24.56 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	5.03	Hours
Factors	10.04 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	25.14	Hours
Factors	50.2 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	30.17	Hours
Factors	60.24 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	30.17	Hours
Factors	60.24 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	51.53	Hours
Factors	102.9 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	103.92	Hours
Factors	207.52 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	16.34	Hours
Factors	32.62 h		0.3612 May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.11	Hours
Factors	40.16	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	44.41	Hours
Factors	88.68	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.51	Hours
Factors	3.01	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.45	Hours
Factors	4.89	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.26	Hours
Factors	4.52	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.12	Hours
Factors	6.23	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.76	Hours
Factors	1.51	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.27	Hours
Factors	6.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.65	Hours
Factors	7.28	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.25	Hours
Factors	0.5	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.26	Hours
Factors	2.51	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.51	Hours
Factors	3.01	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.51	Hours
Factors	3.01	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.57	Hours
Factors	5.14	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.01	Hours
Factors	2.01	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.82	Hours
Factors	1.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.20	Hours
Factors	10.38	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

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751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.22	Hours
Factors	4.43 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.027.28	Dollars
Factors	7923.09 d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 104 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$79.21 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99
Revised number of work orders -None
Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.33	Hours
Factors	120.48	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	45.25	Hours
Factors	90.36	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.91	Hours
Factors	13.79	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.01	Hours
Factors	6.02	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.26	Hours
Factors	4.52	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.35	Hours
Factors	0.69	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300]	1.386448 - Target	

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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	447.47	Dollars
Factors	880.34	d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0320 Description: Misc. Buffer Zone L/L Functions. FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	12.770	46.693
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	2.193	7.584
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2.871	2.871	0	2.871
Total for Activity 1EFB0320:						1.454	31.368	7.947	2.871	42.186	14.963	57.149

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	53.57	Hours

Factors 60.24 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	80.36	Hours
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Factors 90.36 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	26.79	Hours
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Factors 30.12 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	87.06	Hours
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Factors 97.89 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	110.86	Hours
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Factors 124.65 h

0.88934 [SYS 061400] .88934200 - System

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	116.08	Hours
Factors	130.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	129.45	Hours
Factors	145.56							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors	10.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	50.2							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.51	Hours
Factors	102.9							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	207.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.72	Hours
Factors	40.16							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.01	Hours
Factors	32.62							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	78.87	Hours
Factors	88.68							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.35	Hours
Factors	4.89							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.47	Hours
Factors	7.28							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	1.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.81	Hours
Factors	6.53							
0.88934 [SYS 061400] .88934200 - Svstem								

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Activity ID: 1EFB0320

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.54	Hours
Factors	6.23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57	Hours
Factors	5.14							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.23	Hours
Factors	10.38							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.94	Hours
Factors	4.43							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7.152.03	Dollars
Factors	7923.09	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

WBS No: 1EFB09
Activity ID: 1EFB0320

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.15	Hours
Factors	120.48	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.26	Hours
Factors	13.79	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35	Hours
Factors	6.02	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	794.67	Dollars
Factors	880.34	d	1.015	-- FY00 Escalation --				
						0.88934	ISYS 0614001.88934200 - Svstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	1.729.96	Dollars
Factors	1729.96	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.141.33	Dollars
Factors	1141.34	Dollars						

Activity ID: 1EFB0325

Description: Misc. Buffer Zone L/L Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	9.450	43.374
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	1.623	7.014
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	7.512	7.512	0	7.512
Total for Activity 1EFB0325:						1.454	31.368	7.947	7.512	46.827	11.073	57.900

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:

WBS No: 1EFB09
Activity ID: 1EFB0325

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$305.24 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99
Revised number of work orders -None
Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.79	Hours
Factors	30.12 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	87.06	Hours
Factors	97.89 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	110.86	Hours
Factors	124.65 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	129.45	Hours
Factors	145.56 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	116.08	Hours
Factors	130.52 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	50.2 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors	10.04 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.51	Hours
Factors	102.9 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24 h							
						0.88934 [SYS 061400]	.88934200	- Svstem

WBS No: 1EFB09
Activity ID: 1EFB0325

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
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1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	207.52							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.01	Hours
Factors	32.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.72	Hours
Factors	40.16							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	78.87	Hours
Factors	88.68							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.35	Hours
Factors	4.89							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	1.51							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.54	Hours
Factors	6.23							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.81	Hours
Factors	6.53							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.47	Hours
Factors	7.28							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57	Hours
Factors	5.14							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB09
Activity ID: 1EFB0325

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	9.23	Hours
Factors	10.38	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.79	Hours
Factors	2.01	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	3.94	Hours
Factors	4.43	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	7.152.03	Dollars
Factors	7923.09	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$79.21 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99
Revised number of work orders -None
Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	107.15	Hours
Factors	120.48	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	80.36	Hours
Factors	90.36	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	12.26	Hours
Factors	13.79	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.35	Hours
Factors	6.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	4.02	Hours
Factors	4.52	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB09
Activity ID: 1EFB0325

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69	h						

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	794.67	Dollars
Factors	880.34	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	5.157.04	Dollars
Factors	5157.04	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	2.354.70	Dollars
Factors	2354.7	Dollars			

Activity ID: 1EFB0330 Description: Misc. Buffer Zone L/L Functions. FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	9.263	43.186
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	1.591	6.982
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13.874	13.874	0	13.874
Total for Activity 1EFB0330:						1.454	31.368	7.947	13.874	53.189	10.853	64.042

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.79	Hours
Factors	30.12	h			

0.88934 [SYS 061400] .88934200 - Svsstem

WBS No: 1EFB09
Activity ID: 1EFB0330

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	87.06	Hours
Factors	97.89							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	116.08	Hours
Factors	130.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	110.86	Hours
Factors	124.65							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	129.45	Hours
Factors	145.56							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors	10.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	50.2							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.51	Hours
Factors	102.9							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.01	Hours
Factors	32.62							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.72	Hours
Factors	40.16							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	207.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	78.87	Hours
Factors	88.68							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.35	Hours
Factors	4.89							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB09
Activity ID: 1EFB0330

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.81	Hours
Factors	6.53							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.47	Hours
Factors	7.28							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	1.51							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.54	Hours
Factors	6.23							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57	Hours
Factors	5.14							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.23	Hours
Factors	10.38							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.94	Hours
Factors	4.43							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7.152.03	Dollars
Factors	7923.09	d	1.015 -- FY00 Escalation --					
								0.88934 [SYS 061400] .88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB09
Activity ID: 1EFB0330

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	107.15	Hours

Factors 120.48 h

0.88934 [SYS 061400] .88934200 - Svstem

750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	80.36	Hours
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Factors 90.36 h

0.88934 [SYS 061400] .88934200 - Svstem

750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	12.26	Hours
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Factors 13.79 h

0.88934 [SYS 061400] .88934200 - Svstem

751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	5.35	Hours
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Factors 6.02 h

0.88934 [SYS 061400] .88934200 - Svstem

751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	4.02	Hours
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Factors 4.52 h

0.88934 [SYS 061400] .88934200 - Svstem

751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	0.61	Hours
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Factors 0.69 h

0.88934 [SYS 061400] .88934200 - Svstem

A5C SUPPLIES	0000 NONE	C210S Facilities Mamt & Maintenance	Linear	794.67	Dollars
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Factors 880.34 d

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	10.027.02	Dollars

Factors 10027.0 Dollars

ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	3.847.17	Dollars
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Factors 3847.17 Dollars

Activity ID: 1EFB0335 Description: Misc. Buffer Zone L/L Functions, FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.244	1.244	26.771	7.152	0	33.923	7.549	41.473
3	Preventive maintenance	1.00	each	HC	210	210	4.597	795	0	5.392	1.296	6.688
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	6.864	6.864	0	6.864

WBS No: 1EFB09
Activity ID: 1EFB0335

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Total for Activity 1EFB0335:

1.454	31.368	7.947	6.864	46.178	8.846	55.024
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Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$305.24 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	26.79	Hours

Factors 30.12 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	80.36	Hours
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Factors 90.36 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	53.57	Hours
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Factors 60.24 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	87.06	Hours
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Factors 97.89 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	116.08	Hours
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Factors 130.52 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	110.86	Hours
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Factors 124.65 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	129.45	Hours
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Factors 145.56 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	8.93	Hours
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Factors 10.04 h

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EFB09
Activity ID: 1EFB0335

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	50.2							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	91.51	Hours
Factors	102.9							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.01	Hours
Factors	32.62							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.72	Hours
Factors	40.16							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	207.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	78.87	Hours
Factors	88.68							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.35	Hours
Factors	4.89							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.81	Hours
Factors	6.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.47	Hours
Factors	7.28							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	1.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.54	Hours
Factors	6.23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB09
Activity ID: 1EFB0335

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57	Hours
Factors	5.14	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.23	Hours
Factors	10.38	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.94	Hours
Factors	4.43	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7,152.03	Dollars
Factors	7923.09	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - System

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$79.21 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99
Revised number of work orders -None
Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00% (includes Linemen)
Maint. Mech	37.50%
Pipefitter	12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.15	Hours
Factors	120.48	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB09
Activity ID: 1EFB0335

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.26	Hours
Factors	13.79							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35	Hours
Factors	6.02							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	794.67	Dollars
Factors	880.34							

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2.239.39	Dollars
Factors	2239.39				
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	4.624.21	Dollars
Factors	4624.21				

Activity ID: 1EXXB0335 Description: Misc. Buffer Zone L/L Functions, FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.244	1.238	26.654	7.121	0	33.775	9.276	43.051
3	Preventive maintenance	1.00	each	HC	210	209	4.577	791	0	5.368	1.593	6.961
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26.686	26.686	0	26.686
Total for Activity 1EXXB0335:						1.447	31.231	7.912	26.686	65.829	10.868	76.697

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in this cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 166 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$305.24 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99
Revised number of work orders -None
Basis for adjustment - None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%

WBS No: 1EFB09
Activity ID: 1EXXB0335

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36	h						
0.88934 [SYS 061400] .88934200 - Svsstem							53.57	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	87.06	Hours
Factors	60.24	h						
0.88934 [SYS 061400] .88934200 - Svsstem							26.79	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	129.45	Hours
Factors	97.89	h						
0.88934 [SYS 061400] .88934200 - Svsstem							116.08	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	110.86	Hours
Factors	30.12	h						
0.88934 [SYS 061400] .88934200 - Svsstem							8.93	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	145.56	h						
0.88934 [SYS 061400] .88934200 - Svsstem							53.57	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	91.51	Hours
Factors	130.52	h						
0.88934 [SYS 061400] .88934200 - Svsstem							44.64	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	124.65	h						
0.88934 [SYS 061400] .88934200 - Svsstem							53.57	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	29.01	Hours
Factors	10.04	h						
0.88934 [SYS 061400] .88934200 - Svsstem							35.72	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	50.2	h						
0.88934 [SYS 061400] .88934200 - Svsstem							29.01	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.57	Hours
Factors	60.24	h						
0.88934 [SYS 061400] .88934200 - Svsstem							35.72	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	60.24	h						
0.88934 [SYS 061400] .88934200 - Svsstem							184.56	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	32.62	h						
0.88934 [SYS 061400] .88934200 - Svsstem							184.56	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	40.16	h						
0.88934 [SYS 061400] .88934200 - Svsstem							184.56	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.56	Hours
Factors	207.52	h						
0.88934 [SYS 061400] .88934200 - Svsstem							184.56	Hours

WBS No: 1EFB09
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Rockv Flats Closure Project
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750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	78.87	Hours
Factors	88.68							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.35	Hours
Factors	4.89							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.81	Hours
Factors	6.53							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.47	Hours
Factors	7.28							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	1.51							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.54	Hours
Factors	6.23							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.57	Hours
Factors	5.14							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	3.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.45	Hours
Factors	1.63							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.23	Hours
Factors	10.38							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.94	Hours
Factors	4.43							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB09
Activity ID: 1EXXXB0335

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Starts In FY *

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	7.152.03	Dollars
Factors	7923.09 d	1.015	-- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions expected in the cluster, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 104 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$79.21 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are expected to be maintained at the same level as FY99

Revised number of work orders -None

Basis for adjustment - None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	107.15	Hours

Factors 120.48 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	80.36	Hours
Factors	90.36 h							

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.26	Hours
Factors	13.79 h							

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35	Hours
Factors	6.02 h							

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors	4.52 h							

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69 h							

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	794.67	Dollars
Factors	880.34 d	1.015	-- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB09
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CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18,938.09	Dollars
Factors 18938.1 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7,747.58	Dollars
Factors 7747.58 Dollars								

WBS No: 1EFB10 Title: Security Bldgs Cluster Landlord
Activity ID: 1EFB0390 Description: Security Bldgs Cluster Landlord Functions, FY00 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	722	722	15,533	4,847	0	20,380	7,580	27,960
1a	Corrective maintenance	0.74	each	HC	1,167	864	18,626	5,030	0	23,657	9,090	32,746
1b	Corrective maintenance	1.00	each	HC	547	547	17,601	266	0	17,868	8,590	26,457
1c	Corrective maintenance	0.98	each	HC	1,554	1,521	32,796	1,256	0	34,052	16,004	50,056
3	Preventive maintenance	1.00	each	HC	140	140	3,069	531	0	3,600	1,498	5,097
3a	Preventive maintenance	0.74	each	HC	197	146	3,192	552	0	3,744	1,558	5,302
3b	Preventive maintenance	1.00	each	HC	8	8	171	30	0	201	84	284
3c	Preventive maintenance	0.98	each	HC	262	256	5,619	140	0	5,759	2,742	8,501
Total for Activity 1EFB0390:						4,204	96,609	12,651	0	109,260	47,145	156,405

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 116 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$488.44 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	58.12	Hours
Factors 116.06 h 0.3612 May 2000 Earned Value Factor 1.38645 ISYS 0613001 1.386448 - Target					

WBS No: 1EFB10
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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.65	Hours
Factors	107.13		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.77	Hours
Factors	71.42		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.50	Hours
Factors	154.75		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	86.43	Hours
Factors	172.58		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	74.01	Hours
Factors	147.79		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.77	Hours
Factors	71.42		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.96	Hours
Factors	11.9		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	29.81	Hours
Factors	59.52		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.77	Hours
Factors	71.42		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.10	Hours
Factors	122		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.04	Hours
Factors	30.04		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.37	Hours
Factors	38.68		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.84	Hours
Factors	47.61		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	52.66	Hours
Factors	105.15		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	17.88	Hours
Factors	35.71		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	5.36		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	3.57		h	0.3612	May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.90	Hours
Factors	5.8	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.70	Hours
Factors	7.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.88	Hours
Factors	7.74	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.32	Hours
Factors	8.63	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.6	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.49	Hours
Factors	2.98	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	3.57	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	3.57	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.05	Hours
Factors	6.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.16	Hours
Factors	12.3	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.93	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.19	Hours
Factors	2.38	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.63	Hours
Factors	5.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.90	Hours
Factors	1.79	h	0.3612	May 2000	Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4,846.61	Dollars
Factors	1.015	-- FY00 Escalation --	9535	d	0.3612	May 2000	Earned Value Factor	
						1.38645 [SYS 061300]	1.386448	- Target

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB10
Activity ID: 1EFB0390

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Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Approximately 123 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$686.56 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.
The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.27	Hours
Factors	100.39 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.41	Hours
Factors	150.59 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.70	Hours
Factors	163.14 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	104.03	Hours
Factors	207.74 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	108.93	Hours
Factors	217.51 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.14	Hours
Factors	50.2 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	121.48	Hours
Factors	242.58 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	50.27	Hours
Factors	100.39 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.38	Hours
Factors	16.73 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	41.90	Hours
Factors	83.66 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				

WBS No: 1EFB10
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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.27	Hours
Factors	100.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	85.88	Hours
Factors	171.49	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	27.22	Hours
Factors	54.36	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	173.19	Hours
Factors	345.84	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	33.52	Hours
Factors	66.93	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	74.01	Hours
Factors	147.79	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.51	Hours
Factors	5.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.77	Hours
Factors	7.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.09	Hours
Factors	8.16	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.07	Hours
Factors	12.13	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.68	Hours
Factors	3.35	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.20	Hours
Factors	10.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.45	Hours
Factors	10.88	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.42	Hours
Factors	0.84	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.51	Hours
Factors	5.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.09	Hours
Factors	4.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.51	Hours
Factors	5.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

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751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.29	Hours
Factors	8.57	h	0.3612	May 2000 Earned Value Factor				
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.36	Hours
Factors	2.72	h	0.3612	May 2000 Earned Value Factor				
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.66	Hours
Factors	17.29	h	0.3612	May 2000 Earned Value Factor				
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.70	Hours
Factors	7.39	h	0.3612	May 2000 Earned Value Factor				
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.26	Hours
Factors	2.51	h	0.3612	May 2000 Earned Value Factor				
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	6.797.73	Dollars
Factors	13204.4	d	1.028	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

• Approximately 16 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.99	Hours
Factors	3.98	h	0.3612		May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target		

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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	5.97	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.24	Hours
Factors	6.47	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.82	Hours
Factors	9.62	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.13	Hours
Factors	8.24	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.32	Hours
Factors	8.62	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.99	Hours
Factors	3.98	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.66	Hours
Factors	3.32	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.66	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.99	Hours
Factors	3.98	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.41	Hours
Factors	6.8	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.08	Hours
Factors	2.16	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.33	Hours
Factors	2.65	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	13.71	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.93	Hours
Factors	5.86	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.00	Hours
Factors	1.99	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.2	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.16	Hours
Factors	0.32	h	0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target

WBS No: 1EFB10
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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.3	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.48	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.21	Hours
Factors	0.41	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.22	Hours
Factors	0.43	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.03	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.17	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.17	Hours
Factors	0.34	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.11	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.35	Hours
Factors	0.69	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.13	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.29	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	500.79	Hours
Factors	0.1	h	3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	266.08	Dollars
Factors	523.47	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 1c - Corrective maintenance

BOE Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Approximately 290 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Ad-hoc query on MMS data, P&I 002a and spending variance reports.
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$327.65 average for this cluster
Unit Adjustment factor - .9783
Revised Unit Cost - 290 for this cluster
Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%
Stationary Operating Engineer	1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	100.41	Hours
Factors	200.51 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	66.94	Hours
Factors	133.67 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	108.78	Hours
Factors	217.22 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	145.04	Hours
Factors	289.62 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	33.47	Hours
Factors	66.84 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	138.52	Hours
Factors	276.61 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	161.75	Hours
Factors	323 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	66.94	Hours
Factors	133.67 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	55.78	Hours
Factors	111.39 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	11.43	Hours
Factors	22.82 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	114.35	Hours
Factors	228.34	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	66.94	Hours
Factors	133.67	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	36.25	Hours
Factors	72.39	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.62	Hours
Factors	89.11	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	230.61	Hours
Factors	460.49	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	98.55	Hours
Factors	196.79	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.35	Hours
Factors	6.68	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.44	Hours
Factors	10.86	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.02	Hours
Factors	10.03	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.25	Hours
Factors	14.48	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.09	Hours
Factors	16.15	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.67	Hours
Factors	3.34	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.93	Hours
Factors	13.83	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.79	Hours
Factors	5.57	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.35	Hours
Factors	6.68	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.56	Hours
Factors	1.11	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.72	Hours
Factors	11.42	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
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751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.35	Hours
Factors	6.68 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.23	Hours
Factors	4.46 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	11.53	Hours
Factors	23.02 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.81	Hours
Factors	3.62 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	4.93	Hours
Factors	9.84 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448	- Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,239.03	Dollars
Factors	2437.61 d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	44.73	Dollars
Factors	1.015 -- FY00 Escalation --	88	Dollars	0.3612	May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 82 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	71.53	Hours
Factors	142.84 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448	- Target

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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*

Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	53.65	Hours
Factors	107.13 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.19	Hours
Factors	16.35 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.58	Hours
Factors	7.14 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.68	Hours
Factors	5.36 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.41	Hours
Factors	0.82 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	530.55	Dollars
Factors	1.015 -- FY00 Escalation --		1043.78 d	0.3612	May 2000	Earned Value Factor		
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 144 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$95.35 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	100.55	Hours
Factors	200.78 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	75.41	Hours
Factors	150.59 h		0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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WBS Filter 1EFB
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Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.51	Hours
Factors	22.98 h		0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.03	Hours
Factors	10.04 h		0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.77	Hours
Factors	7.53 h		0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.58	Hours
Factors	1.15 h		0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	745.75	Dollars
Factors	1467.16 d		1.015	-- FY00 Escalation --	0.3612	May 2000	Earned Value Factor	
							1.38645	[SYS 061300] 1.386448 - Target

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$30.28 average in this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.99	Hours
Factors	7.96 h		0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	5.97 h		0.3612	May 2000	Earned Value Factor			
							1.38645	[SYS 061300] 1.386448 - Target

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.46	Hours
Factors	0.91 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.4 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.3 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.05 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	29.56	Dollars
Factors	58.16 d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 216 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$75.11 average in this cluster
Unit Adjustment factor - .9783
Revised Unit Cost - 216 for this cluster
Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.88	Hours
Factors	267.34 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	100.41	Hours
Factors	200.51 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.32	Hours
Factors	30.59 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	

WBS No: 1EFB10
Activity ID: 1EFB0390

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	13.37	h	0.3612	May 2000 Earned Value Factor				
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.02	Hours
Factors	10.03	h	0.3612	May 2000 Earned Value Factor				
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.77	Hours
Factors	1.53	h	0.3612	May 2000 Earned Value Factor				
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	137.67	Dollars
Factors	1.015	-- FY00 Escalation --	270.85	d	0.3612	May 2000 Earned Value Factor		
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5.08	Dollars
Factors	1.015	-- FY00 Escalation --	10	Dollars	0.3612	May 2000 Earned Value Factor		

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0395 Description: Security Bldgs Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.475	1.475	31.773	8.480	0	40.253	15.156	55.409
1a	Corrective maintenance	0.74	each	HC	2.073	1.534	33.079	8.820	0	41.899	15.778	57.677
1b	Corrective maintenance	0.98	each	HC	2.760	2.701	58.242	2.230	0	60.473	27.782	88.254
1c	Corrective maintenance	1.00	each	HC	82	82	1.771	473	0	2.243	845	3.088
3	Preventive maintenance	1.00	each	HC	249	249	5.450	942	0	6.392	2.600	8.992
3a	Preventive maintenance	0.74	each	HC	350	259	5.669	980	0	6.649	2.704	9.353
3b	Preventive maintenance	0.98	each	HC	465	455	9.979	248	0	10.227	4.760	14.988
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	145	501
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	12.604	12.604	0	12.604
Total for Activity 1EFB0395:						6.768	146,268	22,226	12,604	181,098	69,770	250,867

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

WBS No: 1EFB10
Activity ID: 1EFB0395

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	103.22	Hours
Factors	116.06	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.63	Hours
Factors	154.75	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	153.48	Hours
Factors	172.58	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	52.93	Hours
Factors	59.52	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	10.58	Hours
Factors	11.9	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	108.50	Hours
Factors	122	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KD10H	776 Complex Steelworkers	Linear	218.81	Hours
Factors	246.04	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.34	Hours
Factors	47.61	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.40	Hours
Factors	38.68	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	93.51	Hours
Factors	105.15	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	31.76	Hours
Factors	35.71	h						
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	5.8	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.68	Hours
Factors	8.63	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.88	Hours
Factors	7.74	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65	Hours
Factors	2.98	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	0.6	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42	Hours
Factors	6.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72	Hours
Factors	1.93	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94	Hours
Factors	12.3	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	1.79	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	8,479.82	Dollars
Factors	9394.03	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System		

Line Item 1a - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily
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predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	133.93	Hours
Factors 150.59 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	89.28	Hours
Factors 100.39 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	145.09	Hours
Factors 163.14 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	193.44	Hours
Factors 217.51 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	215.74	Hours
Factors 242.58 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	44.64	Hours
Factors 50.2 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	184.75	Hours
Factors 207.74 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	14.88	Hours
Factors 16.73 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	74.40	Hours
Factors 83.66 h								
0.88934 ISYS 0614001.88934200 - Svstem								

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	152.51	Hours
Factors	171.49							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.34	Hours
Factors	54.36							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	307.57	Hours
Factors	345.84							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.52	Hours
Factors	66.93							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	7.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.26	Hours
Factors	8.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.68	Hours
Factors	10.88							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.79	Hours
Factors	12.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.24	Hours
Factors	10.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.75	Hours
Factors	0.84							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors	4.18							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.62	Hours
Factors	8.57	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42	Hours
Factors	2.72	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.38	Hours
Factors	17.29	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	11.919.40	Dollars
Factors	13204.4	d	1.015	-- FY00 Escalation --				
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 290 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Ad-hoc query on MMS data, P&I 002a and spending variance reports.
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$327.65 average for this cluster
Unit Adjustment factor - .9783
Revised Unit Cost - 290 for this cluster
Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67	h						
0.88934 [SYS 061400] .88934200 - Svsstem								

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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	193.18	Hours
Factors	217.22							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.32	Hours
Factors	200.51							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	287.26	Hours
Factors	323							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	246.00	Hours
Factors	276.61							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.44	Hours
Factors	66.84							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	257.57	Hours
Factors	289.62							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	99.06	Hours
Factors	111.39							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.29	Hours
Factors	22.82							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	203.07	Hours
Factors	228.34							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	64.38	Hours
Factors	72.39							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	409.53	Hours
Factors	460.49							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	79.25	Hours
Factors	89.11							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	175.01	Hours
Factors	196.79							
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.94	Hours
Factors	6.68							
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.66	Hours
Factors	10.86							
						0.88934	[SYS 061400] .88934200 - Svstem	

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.92	Hours
Factors	10.03							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.36	Hours
Factors	16.15							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.30	Hours
Factors	13.83							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.88	Hours
Factors	14.48							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.97	Hours
Factors	3.34							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.95	Hours
Factors	5.57							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.94	Hours
Factors	6.68							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.99	Hours
Factors	1.11							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.16	Hours
Factors	11.42							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.94	Hours
Factors	6.68							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.22	Hours
Factors	3.62							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.47	Hours
Factors	23.02							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.97	Hours
Factors	4.46							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	8.75	Hours
Factors	9.84							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,200.39	Dollars
Factors	1.015	-- FY00 Escalation --	2437.61	d				
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	79.44	Dollars
Factors	1.015	-- FY00 Escalation --	88	Dollars				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

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was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.75	Hours
Factors	6.47	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.31	Hours
Factors	5.97	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.54	Hours
Factors	3.98	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.67	Hours
Factors	8.62	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.33	Hours
Factors	8.24	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.56	Hours
Factors	9.62	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.59	Hours
Factors	0.66	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.95	Hours
Factors	3.32	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	3.54	Hours
Factors	3.98	h							
							0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE		C070	PAINTERS	KD10H	776 Complex Steelworkers	Linear	6.05	Hours
Factors	6.8	h							
							0.88934	ISYS 0614001.88934200 - Svstem	

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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors	2.16							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	472.53	Dollars
Factors	523.47	d	1.015 -- FY00 Escalation --					
						0.88934	ISYS 0614001.88934200 - Svstem	

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

• Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00%	(includes Linemen)
Maint. Mech	37.50%	
Pipefitter	12.50%	

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors	142.84	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	16.35	h						
						0.88934	ISYS 0614001.88934200 - Svstem	

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Factors	7.14	h						
						0.88934	[SYS 061400]	.88934200 - Svsstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36	h						
						0.88934	[SYS 061400]	.88934200 - Svsstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors	0.82	h						
						0.88934	[SYS 061400]	.88934200 - Svsstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	942.20	Dollars
Factors	1043.78	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$95.35 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.56	Hours
Factors	200.78 h		0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Factors	150.59 h		0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.44	Hours
Factors	22.98 h		0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors	10.04 h		0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	7.53 h		0.88934 [SYS 061400] .88934200 - Svsstem						

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Factors	1.15 h							
							0.88934	[SYS 061400] .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1,324.38	Dollars
Factors	1467.16 d	1.015 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 216 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$75.11 average in this cluster

Unit Adjustment factor - .9783

Revised Unit Cost - 216 for this cluster

Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	237.76	Hours
Factors	267.34 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	178.32	Hours
Factors	200.51 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	27.20	Hours
Factors	30.59 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.89	Hours
Factors	13.37 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.92	Hours
Factors	10.03 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.36	Hours
Factors	1.53 h		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	244.49	Dollars
Factors	1.015 -- FY00 Escalation --		270.85 d		0.88934 [SYS 061400] .88934200 - Svstem				

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A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	9.03	Dollars
Factors	10	Dollars	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours

Factors 7.96 h

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97	h						

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	0.91	h						

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.4	h						

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h						

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	52.50	Dollars
Factors	58.16	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	7.594.02	Dollars
Factors 7594.02 Dollars									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	5.010.14	Dollars
Factors 5010.14 Dollars									

Activity ID: 1EFB0400 Description: Security Bldgs Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.475	1.475	31.773	8.480	0	40.253	11.216	51.469
1a	Corrective maintenance	0.74	each	HC	2.073	1.534	33.079	8.820	0	41.899	11.677	53.576
1b	Corrective maintenance	0.98	each	HC	2.760	2.701	58.242	2.230	0	60.473	20.560	81.032
1c	Corrective maintenance	1.00	each	HC	82	82	1.771	473	0	2.243	625	2.868
3	Preventive maintenance	1.00	each	HC	249	249	5.450	942	0	6.392	1.924	8.316
3a	Preventive maintenance	0.74	each	HC	350	259	5.669	980	0	6.649	2.001	8.650
3b	Preventive maintenance	0.98	each	HC	465	455	9.979	248	0	10.227	3.523	13.750
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	107	464
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	32.816	32.816	0	32.816
Total for Activity 1EFB0400:						6.768	146.268	22.226	32.816	201.309	51.632	252.942

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 116 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$488.44 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99 Revised number of work orders -None Basis for adjustment -None</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors 71.42 h									
								0.88934 [SYS 061400] .88934200 - System	
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	103.22	Hours
Factors 116.06 h									
								0.88934 [SYS 061400] .88934200 - System	

WBS No: 1EFB10
Activity ID: 1EFB0400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	153.48	Hours
Factors	172.58							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.63	Hours
Factors	154.75							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	52.93	Hours
Factors	59.52							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	10.58	Hours
Factors	11.9							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	108.50	Hours
Factors	122							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.40	Hours
Factors	38.68							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	218.81	Hours
Factors	246.04							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.34	Hours
Factors	47.61							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	93.51	Hours
Factors	105.15							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	31.76	Hours
Factors	35.71							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	5.8							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB10
Activity ID: 1EFB0400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.88	Hours
Factors	7.74							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.68	Hours
Factors	8.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	0.6							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65	Hours
Factors	2.98							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42	Hours
Factors	6.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94	Hours
Factors	12.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72	Hours
Factors	1.93							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	1.79							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	8.479.82	Dollars
Factors	9394.03	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1a - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 123 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance</p>
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WBS No: 1EFB10
Activity ID: 1EFB0400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$686.56 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.
The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Factors	150.59 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	145.09	Hours
Factors	163.14 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	193.44	Hours
Factors	217.51 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	50.2 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.75	Hours
Factors	207.74 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	215.74	Hours
Factors	242.58 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	14.88	Hours
Factors	16.73 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	74.40	Hours
Factors	83.66 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39 h							
						0.88934 [SYS 061400]	.88934200	- Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	152.51	Hours
Factors	171.49 h							
						0.88934 [SYS 061400]	.88934200	- Svstem

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.52	Hours
Factors	66.93							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.34	Hours
Factors	54.36							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	307.57	Hours
Factors	345.84							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	7.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.26	Hours
Factors	8.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.68	Hours
Factors	10.88							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.79	Hours
Factors	12.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.24	Hours
Factors	10.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors	4.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.75	Hours
Factors	0.84							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.62	Hours
Factors	8.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42	Hours
Factors	2.72							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB10
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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.38	Hours
Factors	17.29	h						
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39	h						
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	11.919.40	Dollars
Factors	13204.4	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 290 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Ad-hoc query on MMS data, P&I 002a and spending variance reports.

Breakdown of Data:

Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$327.65 average for this cluster
Unit Adjustment factor - .9783
Revised Unit Cost - 290 for this cluster
Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67	h						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	193.18	Hours
Factors	217.22	h						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.32	Hours
Factors	200.51	h						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.44	Hours
Factors	66.84	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB10
Activity ID: 1EFB0400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	287.26	Hours
Factors	323							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	257.57	Hours
Factors	289.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	246.00	Hours
Factors	276.61							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	99.06	Hours
Factors	111.39							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	20.29	Hours
Factors	22.82							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	118.88	Hours
Factors	133.67							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	203.07	Hours
Factors	228.34							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	79.25	Hours
Factors	89.11							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	64.38	Hours
Factors	72.39							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	409.53	Hours
Factors	460.49							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	175.01	Hours
Factors	196.79							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.66	Hours
Factors	10.86							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.94	Hours
Factors	6.68							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.92	Hours
Factors	10.03							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.97	Hours
Factors	3.34							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.88	Hours
Factors	14.48							
						0.88934	[SYS 061400]	.88934200 - Svstem

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.30	Hours
Factors	13.83							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.36	Hours
Factors	16.15							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.95	Hours
Factors	5.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.99	Hours
Factors	1.11							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.94	Hours
Factors	6.68							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.94	Hours
Factors	6.68							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.16	Hours
Factors	11.42							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.47	Hours
Factors	23.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.22	Hours
Factors	3.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.97	Hours
Factors	4.46							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	8.75	Hours
Factors	9.84							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,200.39	Dollars
Factors	1.015	-- FY00 Escalation --	2437.61	d				
0.88934 [SYS 061400] .88934200 - Svstem								
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	79.44	Dollars
Factors	1.015	-- FY00 Escalation --	88	Dollars				
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster

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Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
Factors 6.47 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors 5.97 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors 3.98 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.33	Hours
Factors 8.24 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.56	Hours
Factors 9.62 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.67	Hours
Factors 8.62 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors 3.98 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
Factors 3.32 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors 0.66 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.05	Hours
Factors 6.8 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors 3.98 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors 2.16 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors 2.65 h								
0.88934 [SYS 061400] .88934200 - System								

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29	h						
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	472.53	Dollars
Factors	523.47	d	1.015	-- FY00 Escalation --				
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors	142.84	h						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13	h						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	16.35	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Factors	7.14	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors	0.82	h						
0.88934 [SYS 061400] .88934200 - Svsstem								

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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	942.20	Dollars
Factors	1043.78 d	1.015	-- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$95.35 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00% (includes Linemen)
Maint. Mech	37.50%
Pipefitter	12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	178.56	Hours
Factors	200.78 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	133.93	Hours
Factors	150.59 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	20.44	Hours
Factors	22.98 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.93	Hours
Factors	10.04 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	6.70	Hours
Factors	7.53 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.02	Hours
Factors	1.15 h							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,324.38	Dollars
Factors	1467.16 d	1.015	-- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned

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maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 216 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$75.11 average in this cluster

Unit Adjustment factor - .9783

Revised Unit Cost - 216 for this cluster

Basis for adjustment - Meet KH Targets

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	237.76	Hours

Factors 267.34 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	178.32	Hours
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Factors 200.51 h

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	27.20	Hours
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Factors 30.59 h

0.88934 [SYS 061400] .88934200 - System

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	11.89	Hours
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Factors 13.37 h

0.88934 [SYS 061400] .88934200 - System

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	8.92	Hours
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Factors 10.03 h

0.88934 [SYS 061400] .88934200 - System

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.36	Hours
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Factors 1.53 h

0.88934 [SYS 061400] .88934200 - System

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	244.49	Dollars
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Factors 1.015 -- FY00 Escalation -- 270.85 d

0.88934 [SYS 061400] .88934200 - System

A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	9.03	Dollars
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Factors 1.015 -- FY00 Escalation -- 10 Dollars

0.88934 [SYS 061400] .88934200 - System

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB10
Activity ID: 1EFB0400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

•Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.08	Hours

Factors 7.96 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	5.31	Hours
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Factors 5.97 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.81	Hours
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Factors 0.91 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.36	Hours
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Factors 0.4 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.27	Hours
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Factors 0.3 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.04	Hours
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Factors 0.05 h

0.88934 ISYS 0614001.88934200 - Svstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	52.50	Dollars
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Factors 58.16 d 1.015 -- FY00 Escalation --

0.88934 ISYS 0614001.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	22,529.21	Dollars

Factors 22529.2 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10,286.80	Dollars
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Factors 10286.8 Dollars

Activity ID: 1EFB0405 Description: Security Bldgs Cluster Landlord Functions, FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.475	1.475	31.773	8.480	0	40.253	10.994	51.247
1a	Corrective maintenance	0.74	each	HC	2.073	1.534	33.079	8.820	0	41.899	11.445	53.344

WBS No: 1EFB10
Activity ID: 1EFB0405

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1c	Corrective maintenance	1.00	each	HC	82	82	1.771	473	0	2.243	613	2.856
3	Preventive maintenance	1.00	each	HC	249	249	5.450	942	0	6.392	1.886	8.278
3a	Preventive maintenance	0.74	each	HC	350	259	5.669	980	0	6.649	1.962	8.611
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	105	462
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	34.513	34.513	0	34.513
Total for Activity 1EFB0405:						3.612	78.046	19.747	34.513	132.306	27.004	159.310

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	103.22	Hours
Factors 116.06 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors 71.42 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors 107.13 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors 147.79 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	153.48	Hours
Factors 172.58 h								
0.88934 [SYS 061400] .88934200 - Ssystem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.63	Hours
Factors 154.75 h								
0.88934 [SYS 061400] .88934200 - Ssystem								

WBS No: 1EFB10
Activity ID: 1EFB0405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	10.58	Hours
Factors	11.9							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	52.93	Hours
Factors	59.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	108.50	Hours
Factors	122							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.40	Hours
Factors	38.68							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	218.81	Hours
Factors	246.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.34	Hours
Factors	47.61							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	93.51	Hours
Factors	105.15							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	31.76	Hours
Factors	35.71							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	5.8							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.68	Hours
Factors	8.63							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.88	Hours
Factors	7.74							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	0.6							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB10
Activity ID: 1EFB0405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65	Hours
Factors	2.98	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42	Hours
Factors	6.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72	Hours
Factors	1.93	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94	Hours
Factors	12.3	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	1.79	h						
						0.88934 [SYS 061400] .88934200 - System		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	8.479.82	Dollars
Factors	9394.03	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System		

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%

WBS No: 1EFB10
Activity ID: 1EFB0405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Factors	150.59	h						
0.88934 [SYS 061400] .88934200 - Svstem							89.28	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39	h						
0.88934 [SYS 061400] .88934200 - Svstem							145.09	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	145.09	Hours
Factors	163.14	h						
0.88934 [SYS 061400] .88934200 - Svstem							193.44	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	193.44	Hours
Factors	217.51	h						
0.88934 [SYS 061400] .88934200 - Svstem							184.75	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.75	Hours
Factors	207.74	h						
0.88934 [SYS 061400] .88934200 - Svstem							44.64	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.64	Hours
Factors	50.2	h						
0.88934 [SYS 061400] .88934200 - Svstem							215.74	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	215.74	Hours
Factors	242.58	h						
0.88934 [SYS 061400] .88934200 - Svstem							89.28	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39	h						
0.88934 [SYS 061400] .88934200 - Svstem							14.88	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	14.88	Hours
Factors	16.73	h						
0.88934 [SYS 061400] .88934200 - Svstem							74.40	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	74.40	Hours
Factors	83.66	h						
0.88934 [SYS 061400] .88934200 - Svstem							89.28	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39	h						
0.88934 [SYS 061400] .88934200 - Svstem							152.51	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	152.51	Hours
Factors	171.49	h						
0.88934 [SYS 061400] .88934200 - Svstem							59.52	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.52	Hours
Factors	66.93	h						
0.88934 [SYS 061400] .88934200 - Svstem							48.34	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.34	Hours
Factors	54.36	h						
0.88934 [SYS 061400] .88934200 - Svstem							307.57	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	307.57	Hours
Factors	345.84	h						
0.88934 [SYS 061400] .88934200 - Svstem							131.44	Hours
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79	h						
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB10
Activity ID: 1EFB0405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.26	Hours
Factors	8.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	7.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.79	Hours
Factors	12.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.24	Hours
Factors	10.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.68	Hours
Factors	10.88							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.75	Hours
Factors	0.84							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors	4.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.62	Hours
Factors	8.57							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.38	Hours
Factors	17.29							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42	Hours
Factors	2.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	11.919.40	Dollars
Factors	13204.4	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System								

Line Item 1c - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily
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WBS No: 1EFB10
Activity ID: 1EFB0405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
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predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
Factors 6.47 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors 5.97 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors 3.98 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.33	Hours
Factors 8.24 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.56	Hours
Factors 9.62 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.67	Hours
Factors 8.62 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors 3.98 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors 0.66 h								
0.88934 ISYS 0614001.88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
Factors 3.32 h								
0.88934 ISYS 0614001.88934200 - Svsstem								

WBS No: 1EFB10
Activity ID: 1EFB0405

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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.05	Hours
Factors	6.8							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors	2.16							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB10
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751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	472.53	Dollars
Factors	523.47	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors	142.84	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	16.35							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Factors	7.14							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors	0.82							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	942.20	Dollars
Factors	1043.78		1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$95.35 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.56	Hours
Factors	200.78							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Factors	150.59							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.44	Hours
Factors	22.98							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors	10.04							
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB10
Activity ID: 1EFB0405

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	7.53	h						
						0.88934	[SYS 061400]	.88934200 - Svsstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Factors	1.15	h						
						0.88934	[SYS 061400]	.88934200 - Svsstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.324.38	Dollars
Factors	1467.16	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svsstem

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$30.28 average in this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours
Factors	7.96	h							
							0.88934	[SYS 061400]	.88934200 - Svsstem
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97	h							
							0.88934	[SYS 061400]	.88934200 - Svsstem
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	0.91	h							
							0.88934	[SYS 061400]	.88934200 - Svsstem
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.4	h							
							0.88934	[SYS 061400]	.88934200 - Svsstem
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h							
							0.88934	[SYS 061400]	.88934200 - Svsstem

WBS No: 1EFB10
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Activity Filter *

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	52.50	Dollars
Factors	58.16	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400] .88934200 - Svstem	
								0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	24.942.95	Dollars
Factors	24943 Dollars								
ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	9.570.11	Dollars
Factors	9570.11 Dollars								

Activity ID: 1EFB0410 Description: Security Bldgs Cluster Landlord Functions. FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.475	1.475	31.773	8.480	0	40.253	8.960	49.213
1c	Corrective maintenance	1.00	each	HC	82	82	1.771	473	0	2.243	499	2.743
3	Preventive maintenance	1.00	each	HC	249	249	5.450	942	0	6.392	1.537	7.929
3c	Preventive maintenance	1.00	each	HC	14	14	304	52	0	356	86	442
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	8.598	8.598	0	8.598
Total for Activity 1EFB0410:						1.819	39.298	9.947	8.598	57.843	11.082	68.925

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB10
Activity ID: 1EFB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
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Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	103.22	Hours
Factors	116.06							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	153.48	Hours
Factors	172.58							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.63	Hours
Factors	154.75							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	52.93	Hours
Factors	59.52							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	10.58	Hours
Factors	11.9							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	108.50	Hours
Factors	122							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	218.81	Hours
Factors	246.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.40	Hours
Factors	38.68							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.34	Hours
Factors	47.61							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	93.51	Hours
Factors	105.15							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	31.76	Hours
Factors	35.71							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB10
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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	5.8							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.88	Hours
Factors	7.74							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.68	Hours
Factors	8.63							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	0.6							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65	Hours
Factors	2.98							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42	Hours
Factors	6.1							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94	Hours
Factors	12.3							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72	Hours
Factors	1.93							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	1.79							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	8.479.82	Dollars
Factors	9394.03							
			1.015		-- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

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was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.75	Hours
Factors 6.47 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.31	Hours
Factors 5.97 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.54	Hours
Factors 3.98 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.56	Hours
Factors 9.62 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.33	Hours
Factors 8.24 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.67	Hours
Factors 8.62 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	3.54	Hours
Factors 3.98 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.95	Hours
Factors 3.32 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.59	Hours
Factors 0.66 h		0.88934 ISYS 0614001.88934200 - Ssystem						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.54	Hours
Factors 3.98 h		0.88934 ISYS 0614001.88934200 - Ssystem						

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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.05	Hours
Factors	6.8	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors	2.16	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

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Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	472.53	Dollars
Factors	523.47	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

• Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors	142.84	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors	107.13	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	16.35	h						
0.88934 [SYS 061400] .88934200 - Svstem								

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	6.35	Hours
Factors	7.14	h						
							0.88934	[SYS 061400] .88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	4.77	Hours
Factors	5.36	h						
							0.88934	[SYS 061400] .88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.73	Hours
Factors	0.82	h						
							0.88934	[SYS 061400] .88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	942.20	Dollars
Factors	1043.78	d	1.015	-- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

- Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

	Fiscal Year Preventive Maintenance
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Breakdown of Data:

Item - Preventive maintenance	
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Units - Work Packages

Unit Cost - \$30.28 average in this cluster

Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope

Revised number of work orders - No Change

Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00% (includes Linemen)
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Maint. Mech	37.50%
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Pipefitter	12.50%
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This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	7.08	Hours
Factors	7.96	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	5.31	Hours
Factors	5.97	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.81	Hours
Factors	0.91	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.36	Hours
Factors	0.4	h							
							0.88934	ISYS 0614001 .88934200 - Svstem	

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	52.50	Dollars
Factors	58.16	d	1.015	-- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.805.11	Dollars
	Factors 2805.11 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	5.792.40	Dollars
	Factors 5792.4 Dollars								

Activity ID: 1EXXXB0310 Description: Elect. Substa. Cluster Landlord Functions, FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.88	each	HC	1.475	1.294	27.871	7.438	0	35.310	9.699	45.009
1a	Corrective maintenance	0.65	each	HC	2.073	1.346	29.016	7.737	0	36.753	10.098	46.851
1c	Corrective maintenance	0.88	each	HC	82	72	1.553	414	0	1.968	541	2.508
3	Preventive maintenance	0.88	each	HC	249	218	4.781	826	0	5.607	1.664	7.271
3a	Preventive maintenance	0.65	each	HC	350	227	4.973	860	0	5.833	1.731	7.563
3c	Preventive maintenance	0.88	each	HC	14	12	267	46	0	313	93	405
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	58.486	58.486	0	58.486
Total for Activity 1EXXXB0310:						3.168	68.461	17.322	58.486	144.269	23.825	168.094

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 116 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$488.44 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99

Revised number of work orders -None

Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

WBS No: 1EFB10
Activity ID: 1EXXB0310

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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Activity Filter
Baseline Devl
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Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	103.22	Hours
Factors	116.06	h						
0.88934 ISYS 0614001 .88934200 - System							63.52	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	63.52	Hours
Factors	71.42	h						
0.88934 ISYS 0614001 .88934200 - System							95.28	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	95.28	Hours
Factors	107.13	h						
0.88934 ISYS 0614001 .88934200 - System							131.44	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	131.44	Hours
Factors	147.79	h						
0.88934 ISYS 0614001 .88934200 - System							153.48	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	153.48	Hours
Factors	172.58	h						
0.88934 ISYS 0614001 .88934200 - System							137.63	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	137.63	Hours
Factors	154.75	h						
0.88934 ISYS 0614001 .88934200 - System							52.93	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	52.93	Hours
Factors	59.52	h						
0.88934 ISYS 0614001 .88934200 - System							63.52	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	63.52	Hours
Factors	71.42	h						
0.88934 ISYS 0614001 .88934200 - System							10.58	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	10.58	Hours
Factors	11.9	h						
0.88934 ISYS 0614001 .88934200 - System							108.50	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	108.50	Hours
Factors	122	h						
0.88934 ISYS 0614001 .88934200 - System							63.52	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	63.52	Hours
Factors	71.42	h						
0.88934 ISYS 0614001 .88934200 - System							34.40	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	34.40	Hours
Factors	38.68	h						
0.88934 ISYS 0614001 .88934200 - System							218.81	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	218.81	Hours
Factors	246.04	h						
0.88934 ISYS 0614001 .88934200 - System							42.34	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	42.34	Hours
Factors	47.61	h						
0.88934 ISYS 0614001 .88934200 - System							93.51	Hours
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	93.51	Hours
Factors	105.15	h						
0.88934 ISYS 0614001 .88934200 - System							31.76	Hours
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	31.76	Hours
Factors	35.71	h						
0.88934 ISYS 0614001 .88934200 - System								

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	5.8							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.88	Hours
Factors	7.74							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.68	Hours
Factors	8.63							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	0.6							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65	Hours
Factors	2.98							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42	Hours
Factors	6.1							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72	Hours
Factors	1.93							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94	Hours
Factors	12.3							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	1.79							
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	8,479.82	Dollars
Factors	9394.03	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System		

Line Item 1a - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily
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predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 123 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$686.56 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	133.93	Hours
Factors 150.59 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	89.28	Hours
Factors 100.39 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	145.09	Hours
Factors 163.14 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	215.74	Hours
Factors 242.58 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	193.44	Hours
Factors 217.51 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	184.75	Hours
Factors 207.74 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	44.64	Hours
Factors 50.2 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	14.88	Hours
Factors 16.73 h								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	74.40	Hours
Factors 83.66 h								
0.88934 ISYS 0614001.88934200 - Svstem								

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	89.28	Hours
Factors	100.39							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	152.51	Hours
Factors	171.49							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.34	Hours
Factors	54.36							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	307.57	Hours
Factors	345.84							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.52	Hours
Factors	66.93							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours
Factors	147.79							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors	7.53							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.26	Hours
Factors	8.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.68	Hours
Factors	10.88							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.24	Hours
Factors	10.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.79	Hours
Factors	12.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.72	Hours
Factors	4.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.75	Hours
Factors	0.84							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.62	Hours
Factors	8.57	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	5.02	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42	Hours
Factors	2.72	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.38	Hours
Factors	17.29	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	2.23	Hours
Factors	2.51	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Momt & Maintenance	Linear	11.919.40	Dollars
Factors	13204.4	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
Factors	6.47	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.33	Hours
Factors	8.24	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.56	Hours
Factors	9.62	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.67	Hours
Factors	8.62	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors	0.66	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
Factors	3.32	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.05	Hours
Factors	6.8	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors	2.16	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	472.53	Dollars
Factors	523.47	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB10
Activity ID: 1EXXB0310

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

·Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors 142.84 h								
						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors 107.13 h								
						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors 16.35 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Factors 7.14 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors 5.36 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors 0.82 h								
						0.88934 [SYS 061400] .88934200 - System		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	942.20	Dollars
Factors 1043.78 d 1.015 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - System		

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.

The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 144 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$95.35 average in this cluster

WBS No: 1EFB10
Activity ID: 1EXXXB0310

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 74% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	178.56	Hours
Factors 200.78 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	133.93	Hours
Factors 150.59 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.44	Hours
Factors 22.98 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.93	Hours
Factors 10.04 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.70	Hours
Factors 7.53 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.02	Hours
Factors 1.15 h		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,324.38	Dollars
Factors 1467.16 d		0.88934 [SYS 061400] .88934200 - System						
		1.015 -- FY00 Escalation --						

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$30.28 average in this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

WBS No: 1EFB10
Activity ID: 1EXXXB0310

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours
Factors	7.96		h					
						0.88934	ISYS 0614001 .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97		h					
						0.88934	ISYS 0614001 .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	0.91		h					
						0.88934	ISYS 0614001 .88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.4		h					
						0.88934	ISYS 0614001 .88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3		h					
						0.88934	ISYS 0614001 .88934200 - Svsstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05		h					
						0.88934	ISYS 0614001 .88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	52.50	Dollars
Factors	58.16		d	1.015	-- FY00 Escalation --			
						0.88934	ISYS 0614001 .88934200 - Svsstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	41.505.72	Dollars
Factors	41505.7		Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16.980.01	Dollars
Factors	16980.0		Dollars					

Activity ID: 1EXXXB0410 Description: Security Bldgs Cluster Landlord Functions, FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.87	each	HC	1.475	1.288	27.749	7.406	0	35.155	9.657	44.812
1c	Corrective maintenance	0.87	each	HC	82	72	1.546	413	0	1.959	538	2.497
3	Preventive maintenance	0.87	each	HC	249	217	4.760	823	0	5.583	1.657	7.239
3c	Preventive maintenance	0.87	each	HC	14	12	265	46	0	311	92	404
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	29.322	29.322	0	29.322
Total for Activity 1EXXXB0410:						1.589	34.322	8.687	29.322	72.331	11.944	84.275

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 116 corrective/routine maintenance work actions are expected.

WBS No: 1EFB10
Activity ID: 1EXXXB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$488.44 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours
Factors	71.42	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	103.22	Hours	
Factors	116.06	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours	
Factors	107.13	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	131.44	Hours	
Factors	147.79	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	153.48	Hours	
Factors	172.58	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	137.63	Hours	
Factors	154.75	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours	
Factors	71.42	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	52.93	Hours	
Factors	59.52	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	10.58	Hours	
Factors	11.9	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	108.50	Hours	
Factors	122	h	0.88934 ISYS 0614001 .88934200 - System						
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	63.52	Hours	
Factors	71.42	h	0.88934 ISYS 0614001 .88934200 - System						

WBS No: 1EFB10
Activity ID: 1EXXB0410

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	218.81	Hours
Factors	246.04							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	34.40	Hours
Factors	38.68							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.34	Hours
Factors	47.61							
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	93.51	Hours
Factors	105.15							
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	31.76	Hours
Factors	35.71							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors	5.36							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	5.8							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.57	Hours
Factors	7.39							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.88	Hours
Factors	7.74							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.68	Hours
Factors	8.63							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.53	Hours
Factors	0.6							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.65	Hours
Factors	2.98							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.17	Hours
Factors	3.57							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.42	Hours
Factors	6.1							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.72	Hours
Factors	1.93							

WBS No: 1EFB10
Activity ID: 1EXXXB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.94	Hours
Factors	12.3	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	1.79	h						
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	8,479.82	Dollars
Factors	9394.03	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1c - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 16 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$209.25 average for this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
Factors	6.47	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors	5.97	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98	h						
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB10
Activity ID: 1EXXXB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.56	Hours
Factors	9.62							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.33	Hours
Factors	8.24							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.67	Hours
Factors	8.62							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors	0.66							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.95	Hours
Factors	3.32							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.54	Hours
Factors	3.98							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.05	Hours
Factors	6.8							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.92	Hours
Factors	2.16							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.19	Hours
Factors	13.71							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	2.65							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	5.21	Hours
Factors	5.86							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	1.99							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.28	Hours
Factors	0.32							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.43	Hours
Factors	0.48							
0.88934 [SYS 061400] .88934200 - System								

WBS No: 1EFB10
Activity ID: 1EXXXB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.41							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.38	Hours
Factors	0.43							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.30	Hours
Factors	0.34							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.2							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.61	Hours
Factors	0.69							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.12	Hours
Factors	0.13							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.26	Hours
Factors	0.29							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	472.53	Dollars
Factors	523.47	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 82 preventative maintenance work actions are expected.

Data Source - Maintenance Management System and P&I Reporting System CPRs and Spending variance reports for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$112.28 average

WBS No: 1EFB10
Activity ID: 1EXXXB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 thru 05 are expected to require the same level of effort as FY99
Revised number of work orders -None
Basis for adjustment -None

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.03	Hours
Factors 142.84 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	95.28	Hours
Factors 107.13 h		0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors 16.35 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.35	Hours
Factors 7.14 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.77	Hours
Factors 5.36 h		0.88934 [SYS 061400] .88934200 - Svstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors 0.82 h		0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	942.20	Dollars
Factors 1043.78 d		0.88934 [SYS 061400] .88934200 - System						
		1.015 -- FY00 Escalation --						

Line Item 3c - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 18 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$30.28 average in this cluster
Adjustment factor - FY99 is used as a base year. FY00 thru 05 are equal to FY99 scope
Revised number of work orders - No Change
Basis for adjustment - Directed targets.

The percentage of maintenance effort (labor Type) required is as follows:

WBS No: 1EFB10
Activity ID: 1EXXB0410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.08	Hours
Factors 7.96 h		0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.31	Hours
Factors 5.97 h		0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors 0.91 h		0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors 0.4 h		0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors 0.3 h		0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors 0.05 h		0.88934 [SYS 061400] .88934200 - Svsstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	52.50	Dollars
Factors 58.16 d		1.015 -- FY00 Escalation --						
		0.88934 [SYS 061400] .88934200 - Svsstem						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	20.809.16	Dollars
Factors 20809.2 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8.513.04	Dollars
Factors 8513.04 Dollars								

WBS No: 1EFB11 Title: 125 Cluster Landlord
Activity ID: 1EFB0435 Description: 125 Cluster Landlord Functions, FY00

Line Item		Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1		Corrective maintenance	1.00	each	HC	378	378	8.142	2.171	0	10.313	3.973	14.287
1a		Corrective maintenance	0.83	each	HC	553	459	9.885	2.963	0	12.848	4.824	17.672
3		Preventive maintenance	1.00	each	HC	64	64	1.395	241	0	1.637	681	2,318
3a		Preventive maintenance	0.83	each	HC	249	207	4.535	784	0	5.319	2.213	7.531
Total for Activity 1EFB0435:							1.107	23.957	6.159	0	30.116	11.691	41.807

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 3 corrective/routine maintenance work actions are expected.

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	24.39	Hours
Factors	48.71 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	16.26	Hours
Factors	32.47 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	26.43	Hours
Factors	52.77 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	35.24	Hours
Factors	70.36 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	33.65	Hours
Factors	67.2 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.13	Hours
Factors	16.24 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	39.30	Hours
Factors	78.47 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.71	Hours
Factors	5.41 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	13.55	Hours
Factors	27.06 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	16.26	Hours
Factors	32.47 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	27.78	Hours
Factors	55.47 h		0.3612 May 2000 Earned Value Factor					
						1.38645 ISYS 0613001	1.386448 - Target	

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter *
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.26	Hours
Factors	32.47	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.84	Hours
Factors	21.65	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.80	Hours
Factors	17.58	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.02	Hours
Factors	111.86	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	23.94	Hours
Factors	47.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.22	Hours
Factors	2.44	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	1.62	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.32	Hours
Factors	2.64	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.96	Hours
Factors	3.92	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.68	Hours
Factors	3.36	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.41	Hours
Factors	0.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.76	Hours
Factors	3.52	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.68	Hours
Factors	1.35	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	1.62	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.81	Hours
Factors	1.62	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.39	Hours
Factors	2.77	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.54	Hours
Factors	1.08	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.88	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.80	Hours
Factors	5.59	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	2.39	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,170.96	Dollars
Factors	4271.05	d	1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$499.77 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.74	Hours
Factors	53.4	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	40.11	Hours
Factors	80.1	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.46	Hours
Factors	86.78	h	0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	55.34	Hours
Factors	110.51	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.94	Hours
Factors	115.7	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	52.00	Hours
Factors	103.84	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.37	Hours
Factors	26.7	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	26.74	Hours
Factors	53.4	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.46	Hours
Factors	8.9	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	22.28	Hours
Factors	44.5	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.68	Hours
Factors	91.22	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.74	Hours
Factors	53.4	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.06	Hours
Factors	99.96	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.48	Hours
Factors	28.92	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	17.83	Hours
Factors	35.6	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	25.91	Hours
Factors	51.74	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.00	Hours
Factors	4	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.10	Hours
Factors	4.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	2.67	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.23	Hours
Factors	6.45	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89	Hours
Factors	5.78	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.77	Hours
Factors	5.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.67	Hours
Factors	1.34	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.23	Hours
Factors	0.45	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	2.67	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.12	Hours
Factors	2.23	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.28	Hours
Factors	4.56	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.34	Hours
Factors	2.67	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	1.44	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.61	Hours
Factors	9.2	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.89	Hours
Factors	1.78	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.97	Hours
Factors	3.93	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.570.10	Dollars
Factors	7023.66	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 6 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$740.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	32.52	Hours
Factors	64.94 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	24.39	Hours
Factors	48.71 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.72	Hours
Factors	7.43 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.63	Hours
Factors	3.25 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.22	Hours
Factors	2.44 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.19	Hours
Factors	0.37 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	241.22	Dollars
Factors	474.56 d		1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

WBS No: 1EFB11
Activity ID: 1EFB0435

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	127.34	Hours
Factors	254.29	h	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	95.51	Hours
Factors	190.72	h	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	14.57	Hours
Factors	29.1	h	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	6.36	Hours
Factors	12.71	h	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	4.78	Hours
Factors	9.54	h	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.73	Hours
Factors	1.45	h	0.3612	Mav 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	944.50	Dollars
Factors	1858.16	d	1.015	-- FY00 Escalation --		0.3612	Mav 2000 Earned Value Factor		
							1.38645 [SYS 061300] 1.386448 - Target		

Activity ID: 1EFB0440 Description: 125 Cluster Landlord Functions. FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	670	670	14,445	3,855	0	18,301	6,890	25,191
1a	Corrective maintenance	0.83	each	HC	1,103	915	19,737	5,262	0	25,000	9,415	34,414
3	Preventive maintenance	1.00	each	HC	113	113	2,478	428	0	2,906	1,182	4,088
3b	Preventive maintenance	0.83	each	HC	186	154	3,382	585	0	3,967	1,613	5,580
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	3,665	3,665	0	3,665
Total for Activity 1EFB0440:						1,853	40,043	10,131	3,665	53,838	19,100	72,939

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

WBS No: 1EFB11
Activity ID: 1EFB0440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
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Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	43.32	Hours
Factors	48.71 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	28.88	Hours
Factors	32.47 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	46.93	Hours
Factors	52.77 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	62.57	Hours
Factors	70.36 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	59.76	Hours
Factors	67.2 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	69.79	Hours
Factors	78.47 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	4.81	Hours
Factors	5.41 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	24.07	Hours
Factors	27.06 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	28.88	Hours
Factors	32.47 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	49.33	Hours
Factors	55.47 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	28.88	Hours
Factors	32.47 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	19.25	Hours
Factors	21.65 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	15.63	Hours
Factors	17.58 h					
				0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB11
Activity ID: 1EFB0440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
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Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.48	Hours
Factors	111.86							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.52	Hours
Factors	47.81							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	14.44	Hours
Factors	16.24							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.35	Hours
Factors	2.64							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.49	Hours
Factors	3.92							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	3.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.13	Hours
Factors	3.52							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.46	Hours
Factors	2.77							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.96	Hours
Factors	1.08							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.97	Hours
Factors	5.59							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB11
Activity ID: 1EFB0440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
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751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.39	h						
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.855.40	Dollars
Factors	4271.05	d	1.015	-- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$499.77 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.49	Hours
Factors	53.4	h						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.18	Hours
Factors	86.78	h						
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	71.24	Hours
Factors	80.1	h						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	102.90	Hours
Factors	115.7	h						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	98.28	Hours
Factors	110.511	h						
							0.88934	[SYS 061400] .88934200 - Svstem

WBS No: 1EFB11
Activity ID: 1EFB0440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	114.76	Hours
Factors	129.04							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.75	Hours
Factors	26.7							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	39.58	Hours
Factors	44.5							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	47.49	Hours
Factors	53.4							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	7.92	Hours
Factors	8.9							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.13	Hours
Factors	91.22							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.49	Hours
Factors	53.4							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	163.60	Hours
Factors	183.96							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	31.66	Hours
Factors	35.6							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.72	Hours
Factors	28.92							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	69.92	Hours
Factors	78.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.37	Hours
Factors	2.67							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.86	Hours
Factors	4.34							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.56	Hours
Factors	4							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.92	Hours
Factors	5.53							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.14	Hours
Factors	5.78							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.74	Hours
Factors	6.45							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB11
Activity ID: 1EFB0440

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Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.19	Hours
Factors	1.34							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.40	Hours
Factors	0.45							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.37	Hours
Factors	2.67							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.98	Hours
Factors	2.23							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.37	Hours
Factors	2.67							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.06	Hours
Factors	4.56							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.18	Hours
Factors	9.2							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.58	Hours
Factors	1.78							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.28	Hours
Factors	1.44							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.50	Hours
Factors	3.93							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	6,340.30	Dollars
Factors	7023.84	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$740.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:
Electrician 50.00% (includes Linemen)

WBS No: 1EFB11
Activity ID: 1EFB0440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75	Hours
Factors 64.94 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors 48.71 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61	Hours
Factors 7.43 h								
0.88934 [SYS 061400] .88934200 - System								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89	Hours
Factors 3.25 h								
0.88934 [SYS 061400] .88934200 - System								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors 2.44 h								
0.88934 [SYS 061400] .88934200 - System								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors 0.37 h								
0.88934 [SYS 061400] .88934200 - System								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	428.38	Dollars
Factors 474.56 d 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
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WBS No: 1EFB11
Activity ID: 1EFB0440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	94.98	Hours
Factors	106.8							
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	71.24	Hours
Factors	80.1							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.87	Hours
Factors	12.22							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.75	Hours
Factors	5.34							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.56	Hours
Factors	4							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.54	Hours
Factors	0.61							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	704.48	Dollars
Factors	780.43		d	1.015	-- FY00 Escalation --			
0.88934 [SYS 061400] .88934200 - Svstem								
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.207.94	Dollars
	Factors 2207.94 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.456.68	Dollars
	Factors 1456.68 Dollars								

Activity ID: 1EFB0445 Description: 125 Cluster Landlord Functions. FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	670	670	14.445	3.855	0	18.301	5.099	23.400
3	Preventive maintenance	1.00	each	HC	113	113	2.478	428	0	2.906	875	3.781
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	4.052	4.052	0	4.052
Total for Activity 1EFB0445:						784	16.924	4.284	4.052	25.259	5.974	31.233

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

WBS No: 1EFB11
Activity ID: 1EFB0445

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors	48.71	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	46.93	Hours
Factors	52.77	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.57	Hours
Factors	70.36	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.76	Hours
Factors	67.2	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.79	Hours
Factors	78.47	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.07	Hours
Factors	27.06	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	49.33	Hours
Factors	55.47	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.25	Hours
Factors	21.65	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.48	Hours
Factors	111.86	h						
0.88934 ISYS 0614001 .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.63	Hours
Factors	17.58	h						
0.88934 ISYS 0614001 .88934200 - Svstem								

WBS No: 1EFB11
Activity ID: 1EFB0445

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.52	Hours
Factors	47.81							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	14.44	Hours
Factors	16.24							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.35	Hours
Factors	2.64							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.49	Hours
Factors	3.92							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	3.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.13	Hours
Factors	3.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.46	Hours
Factors	2.77							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.96	Hours
Factors	1.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.97	Hours
Factors	5.59							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.39							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB11
Activity ID: 1EFB0445

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.85540	Dollars
Factors	4271.05	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$740.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00%	(includes Linemen)
Maint. Mech	37.50%	
Pipefitter	12.50%	

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75Hours
Factors	64.94	h	0.88934 [SYS 061400] .88934200 - Svstem					
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32Hours
Factors	48.71	h	0.88934 [SYS 061400] .88934200 - Svstem					
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61Hours
Factors	7.43	h	0.88934 [SYS 061400] .88934200 - Svstem					
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89Hours
Factors	3.25	h	0.88934 [SYS 061400] .88934200 - Svstem					
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17Hours
Factors	2.44	h	0.88934 [SYS 061400] .88934200 - Svstem					
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33Hours
Factors	0.37	h	0.88934 [SYS 061400] .88934200 - Svstem					
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	428.38Dollars
Factors	474.56	d	1.015	-- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB11
Activity ID: 1EFB0445

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.781.92	Dollars
Factors 2781.92 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.270.22	Dollars
Factors 1270.22 Dollars								

Activity ID: 1EFB0450 Description: 125 Cluster Landlord Functions. FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	670	670	14.445	3.855	0	18.301	4.998	23.299
1a	Corrective maintenance	0.83	each	HC	2.625	2.179	46.994	12.530	0	59.523	16.260	75.783
3	Preventive maintenance	1.00	each	HC	113	113	2.478	428	0	2.906	857	3.764
3a	Preventive maintenance	0.83	each	HC	443	367	8.053	1.392	0	9.445	2.786	12.231
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	31.825	31.825	0	31.825
Total for Activity 1EFB0450:						3.330	71.970	18.206	31.825	122.001	24.902	146.903

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 3 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$9104.66 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	46.93	Hours
Factors 52.77 h								
							0.88934 [SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors 48.71 h								
							0.88934 [SYS 061400] .88934200 - System	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors 32.47 h								
							0.88934 [SYS 061400] .88934200 - System	

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Project
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*

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.79	Hours
Factors	78.47							
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.57	Hours
Factors	70.36							
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.76	Hours
Factors	67.2							
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.07	Hours
Factors	27.06							
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47							
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41							
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	49.33	Hours
Factors	55.47							
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.48	Hours
Factors	111.86							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.63	Hours
Factors	17.58							
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.25	Hours
Factors	21.65							
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.52	Hours
Factors	47.81							
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	14.44	Hours
Factors	16.24							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.35	Hours
Factors	2.64							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	3.36							

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.13	Hours
Factors	3.52							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.49	Hours
Factors	3.92							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.46	Hours
Factors	2.77							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.97	Hours
Factors	5.59							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.96	Hours
Factors	1.08							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.39							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.855.40	Dollars
Factors	4271.05	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$499.77 average for this cluster

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	183.76	Hours
Factors	206.62	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	169.62	Hours
Factors	190.72	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	113.08	Hours
Factors	127.15	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	233.99	Hours
Factors	263.11	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	273.23	Hours
Factors	307.23	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	56.54	Hours
Factors	63.57	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	245.00	Hours
Factors	275.48	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	94.23	Hours
Factors	105.95	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	18.85	Hours
Factors	21.19	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	113.08	Hours
Factors	127.15	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	193.16	Hours
Factors	217.19	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	113.08	Hours
Factors	127.15	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	61.23	Hours
Factors	68.85	h						
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.38	Hours
Factors	84.76							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	389.54	Hours
Factors	438.01							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	166.47	Hours
Factors	187.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48	Hours
Factors	9.54							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.19	Hours
Factors	10.33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.66	Hours
Factors	15.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.70	Hours
Factors	13.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.25	Hours
Factors	13.77							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.83	Hours
Factors	3.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.71	Hours
Factors	5.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.94	Hours
Factors	1.06							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.66	Hours
Factors	10.86							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.06	Hours
Factors	3.44							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.48	Hours
Factors	21.9							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.77	Hours
Factors	4.24	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	8.32	Hours
Factors	9.36	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	15.095.94	Dollars
Factors	1.015	-- FY00 Escalation --	16723.4	d				
						0.88934	[SYS 061400]	.88934200 - Ssystem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$740.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75	Hours
Factors	64.94	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors	48.71	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61	Hours
Factors	7.43	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89	Hours
Factors	3.25	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.37	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	428.38	Dollars
Factors	474.56	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.15	Hours

Factors 254.29 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.62	Hours
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Factors 190.72 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.88	Hours
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Factors 29.1 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.30	Hours
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Factors 12.71 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48	Hours
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Factors 9.54 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
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Factors 1.45 h

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1,677.33	Dollars
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Factors 1858.16 d

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1EFB11
Activity ID: 1EFB0450

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
		CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	23,000.29 Dollars
		Factors 23000.3 Dollars							
		ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,824.75 Dollars
		Factors 8824.75 Dollars							

Activity ID: 1EFB0455 Description: 125 Cluster Landlord Functions, FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	670	670	14,445	3,855	0	18,301	4,074	22,374
1a	Corrective maintenance	0.83	each	HC	2,625	2,179	46,994	12,530	0	59,523	13,252	72,776
3	Preventive maintenance	1.00	each	HC	113	113	2,478	428	0	2,906	699	3,605
3a	Preventive maintenance	0.83	each	HC	443	367	8,053	1,392	0	9,445	2,271	11,716
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	15,744	15,744	0	15,744
Total for Activity 1EFB0455:						3,330	71,970	18,206	15,744	105,920	20,296	126,215

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 3 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$9104.66 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources		Cost Element	Skill		Department		Curve	Quantity	Units
		750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	43.32 Hours
		Factors 48.71 h							
									0.88934 [SYS 061400] .88934200 - System
		750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	28.88 Hours
		Factors 32.47 h							
									0.88934 [SYS 061400] .88934200 - System
		750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	46.93 Hours
		Factors 52.77 h							
									0.88934 [SYS 061400] .88934200 - System

WBS No: 1EFB11
Activity ID: 1EFB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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WBS Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.57	Hours
Factors	70.36							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.76	Hours
Factors	67.2							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.79	Hours
Factors	78.47							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.07	Hours
Factors	27.06							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	49.33	Hours
Factors	55.47							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.25	Hours
Factors	21.65							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.48	Hours
Factors	111.86							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.63	Hours
Factors	17.58							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.52	Hours
Factors	47.81							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	14.44	Hours
Factors	16.24							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.35	Hours
Factors	2.64							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.49	Hours
Factors	3.92							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB11
Activity ID: 1EFB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	3.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.13	Hours
Factors	3.52							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.46	Hours
Factors	2.77							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.96	Hours
Factors	1.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.97	Hours
Factors	5.59							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.39							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.855.40	Dollars
Factors	4271.05	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$499.77 average for this cluster

WBS No: 1EFB11
Activity ID: 1EFB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	113.08	Hours
Factors	127.15 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	169.62	Hours
Factors	190.72 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	183.76	Hours
Factors	206.62 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	233.99	Hours
Factors	263.11 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	273.23	Hours
Factors	307.23 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	56.54	Hours
Factors	63.57 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	245.00	Hours
Factors	275.48 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	18.85	Hours
Factors	21.19 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	113.08	Hours
Factors	127.15 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Linear	94.23	Hours
Factors	105.95 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	113.08	Hours
Factors	127.15 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	193.16	Hours
Factors	217.19 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	389.54	Hours
Factors	438.01 h					
				0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB11
Activity ID: 1EFB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.23	Hours
Factors	68.85							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.38	Hours
Factors	84.76							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	166.47	Hours
Factors	187.18							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48	Hours
Factors	9.54							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.19	Hours
Factors	10.33							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.70	Hours
Factors	13.16							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.25	Hours
Factors	13.77							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.83	Hours
Factors	3.18							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.66	Hours
Factors	15.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.71	Hours
Factors	5.3							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.94	Hours
Factors	1.06							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.66	Hours
Factors	10.86							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.06	Hours
Factors	3.44							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.48	Hours
Factors	21.9							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB11
Activity ID: 1EFB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.77	Hours
Factors	4.24	h						
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	8.32	Hours
Factors	9.36	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	15.095.94	Dollars
Factors	16723.4	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Svsstem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$740.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75	Hours
Factors	64.94	h						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors	48.71	h						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61	Hours
Factors	7.43	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89	Hours
Factors	3.25	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.37	h						
						0.88934	[SYS 061400]	.88934200 - Svsstem

WBS No: 1EFB11
Activity ID: 1EFB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	428.38	Dollars
Factors	474.56	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.15	Hours

Factors 254.29 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.62	Hours
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Factors 190.72 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.88	Hours
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Factors 29.1 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.30	Hours
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Factors 12.71 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48	Hours
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Factors 9.54 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
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Factors 1.45 h

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1,677.33	Dollars
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Factors 1858.16 d

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1EFB11
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units		
	CON	CONTINGENCY			0000	NONE		ZDEPT	No Department	Linear	5.136.72	Dollars
	Factors 5136.72 Dollars											
	ESC	ESCALATION			0000	NONE		ZDEPT	No Department	Linear	10.607.06	Dollars
	Factors 10607.1 Dollars											

Activity ID: 1EXXXB0455 Description: 125 Cluster Landlord Functions, FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	670	668	14.382	3.839	0	18.221	5.005	23.226
1a	Corrective maintenance	0.83	each	HC	2.625	2.169	46.789	12.475	0	59.264	16.282	75.546
3	Preventive maintenance	1.00	each	HC	113	113	2.467	427	0	2.894	859	3.752
3a	Preventive maintenance	0.83	each	HC	443	366	8.018	1.386	0	9.404	2.790	12.194
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	61.212	61.212	0	61.212
Total for Activity 1EXXXB0455:						3.315	71.656	18.126	61.212	150.995	24.936	175.931

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 3 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$9104.66 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	43.32	Hours
Factors 48.71 h										
0.88934 [SYS 061400] .88934200 - System										
	750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	28.88	Hours
Factors 32.47 h										
0.88934 [SYS 061400] .88934200 - System										
	750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	46.93	Hours
Factors 52.77 h										
0.88934 [SYS 061400] .88934200 - System										

WBS No: 1EFB11
Activity ID: 1EXXB0455

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.57	Hours
Factors	70.36							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	59.76	Hours
Factors	67.2							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.79	Hours
Factors	78.47							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.81	Hours
Factors	5.41							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	24.07	Hours
Factors	27.06							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	49.33	Hours
Factors	55.47							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.88	Hours
Factors	32.47							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.25	Hours
Factors	21.65							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	99.48	Hours
Factors	111.86							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.63	Hours
Factors	17.58							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	42.52	Hours
Factors	47.81							
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	14.44	Hours
Factors	16.24							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.35	Hours
Factors	2.64							
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.49	Hours
Factors	3.92							
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB11
Activity ID: 1EXXB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.99	Hours
Factors	3.36							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.13	Hours
Factors	3.52							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.20	Hours
Factors	1.35							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.24	Hours
Factors	0.27							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.46	Hours
Factors	2.77							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.44	Hours
Factors	1.62							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.96	Hours
Factors	1.08							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.97	Hours
Factors	5.59							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.13	Hours
Factors	2.39							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3.855.40	Dollars
Factors	4271.05	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 214 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$499.77 average for this cluster

WBS No: 1EFB11
Activity ID: 1EXXB0455

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
Factors	127.15 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	169.62	Hours
Factors	190.72 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	183.76	Hours
Factors	206.62 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	233.99	Hours
Factors	263.11 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	273.23	Hours
Factors	307.23 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	56.54	Hours
Factors	63.57 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	245.00	Hours
Factors	275.48 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	18.85	Hours
Factors	21.19 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
Factors	127.15 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	94.23	Hours
Factors	105.95 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	113.08	Hours
Factors	127.15 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	193.16	Hours
Factors	217.19 h					
				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	389.54	Hours
Factors	438.01 h					
				0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB11
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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	61.23	Hours
Factors	68.85							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.38	Hours
Factors	84.76							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	166.47	Hours
Factors	187.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48	Hours
Factors	9.54							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.19	Hours
Factors	10.33							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.70	Hours
Factors	13.16							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.25	Hours
Factors	13.77							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.83	Hours
Factors	3.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.66	Hours
Factors	15.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.71	Hours
Factors	5.3							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.94	Hours
Factors	1.06							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.66	Hours
Factors	10.86							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.66	Hours
Factors	6.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.06	Hours
Factors	3.44							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.48	Hours
Factors	21.9							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.77	Hours
Factors	4.24	h						
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	8.32	Hours
Factors	9.36	h						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	15.095.94	Dollars
Factors	16723.4	d	1.015	-- FY00 Escalation --				
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 6 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$740.17 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.75	Hours
Factors	64.94	h						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	43.32	Hours
Factors	48.71	h						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.61	Hours
Factors	7.43	h						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.89	Hours
Factors	3.25	h						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.17	Hours
Factors	2.44	h						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.37	h						
0.88934 [SYS 061400] .88934200 - Svstem								

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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	428.38	Dollars
Factors	474.56	d	1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 303 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$57.39 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 83% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.15	Hours

Factors 254.29 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	169.62	Hours
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Factors 190.72 h

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.88	Hours
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Factors 29.1 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.30	Hours
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Factors 12.71 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	8.48	Hours
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Factors 9.54 h

0.88934 [SYS 061400] .88934200 - Svsstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
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Factors 1.45 h

0.88934 [SYS 061400] .88934200 - Svsstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1,677.33	Dollars
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Factors 1858.16 d

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	43.440.79	Dollars
Factors 43440.8 Dollars									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	17.771.65	Dollars
Factors 17771.7 Dollars									

WBS No: 1EFB12	Title: 750 Cluster Landlord
Activity ID: 1EFB0460	Description: 750 Cluster Landlord Functions, FY00

		Cost Risk		Schedule Risk								
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	1.736	1.736	36.404	23.624	0	60.029	17.765	77.794
3	Preventive maintenance	1.00	each	HC	338	338	7.169	2.587	0	9.756	3.498	13.254
5 - tH568100B10	SSOC Support to Bldg 705	1.00	each	EE	413	413	11.151	0	0	11.151	5.442	16.593
5a	SSOC Support to Bldg 705	1.00	each	EE	221	221	5.976	0	0	5.976	2.916	8.892
Total for Activity 1EFB0460:						2.708	60.700	26.211	0	86.911	29.622	116.533

Line Item 1 - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.
	<p>·Approximately 142 corrective/routine maintenance work actions are expected.</p> <p>The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$1872.34 average for this cluster Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074 Revised Unit - \$1720.68 Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 32.31% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	127.70	Hours
Factors 255 h 0.3612 May 2000 Earned Value Factor									
								1.38645 [SYS 061300]	1.386448 - Target
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	78.62	Hours
Factors 157 h 0.3612 May 2000 Earned Value Factor									
								1.38645 [SYS 061300]	1.386448 - Target

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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	117.68	Hours
Factors	235	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	162.25	Hours
Factors	324	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	189.80	Hours
Factors	379	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	170.27	Hours
Factors	340	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.06	Hours
Factors	78	hours	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	78.62	Hours
Factors	157	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	65.60	Hours
Factors	131	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	13.02	Hours
Factors	26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	134.21	Hours
Factors	268	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	78.62	Hours
Factors	157	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	52.08	Hours
Factors	104	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.57	Hours
Factors	85	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	270.42	Hours
Factors	540	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	115.68	Hours
Factors	231	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	22,877.93	Dollars
Factors	1.015	-- FY00 Escalation --	45009	d	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	746.18	Dollars
Factors	1468	Dollars	1.015	-- FY00 Escalation --	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster

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in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 160 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$269.11 average in this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$247.31

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	156.75	Hours

Factors 313 h 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	162.76	Hours
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Factors 325 h 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.03	Hours
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Factors 36 h 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2,504.44	Dollars
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Factors 1.015 -- FY00 Escalation -- 4927.12 h 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	82.85	Dollars
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Factors 1.015 -- FY00 Escalation -- 163 dollars 0.3612 May 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

Line Item 5 - th568100B10 - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year

Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC

Breakdown of Cost Data:

Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.

Units - Hours

Unit Cost - \$48.81

Unit Cost Adjustment factor - None

Revised Unit Cost - none

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	413.00	Hours

Factors 441.955 H 0.67401 January 2000 Earned Value Factor

1.38645 [SYS 061300] 1.386448 - Target

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Starts In FY *

Line Item 5a - SSOC Support to Bldg 705

BOE	The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE. Estimators Experience - One Year Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC Breakdown of Cost Data: Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only. Units - Hours Unit Cost - \$48.81 Unit Cost Adjustment factor - None Revised Unit Cost - none Basis for adjustment - None This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.
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Cost Element		Skill		Department		Curve	Quantity	Units
751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Svcs Steelworkers	Linear	221.32	Hours
Factors	441.955 H	0.3612 May 2000 Earned Value Factor						

1.38645 [SYS 061300] 1.386448 - Target

Activity ID: 1EFB0470 Description: 750 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	3.083	3.083	64.650	41.354	0	106.004	30.838	136.843
3	Preventive maintenance	1.00	each	HC	599	599	12.731	4.595	0	17.326	6.073	23.398
5 - tH568101B10	SSOC Support to Bldg 705	1.00	each	EE	364	364	9.839	0	0	9.839	4.693	14.532
5a	SSOC Support to Bldg 705	1.00	each	EE	364	364	9.839	0	0	9.839	4.693	14.532
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	10.014	10.014	0	10.014
Total for Activity 1EFB0470:						4.412	97.059	45.949	10.014	153.022	46.297	199.320

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 142 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$1872.34 average for this cluster Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074 Revised Unit - \$1720.68 Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.</p> <p>The percentage of maintenance effort (labor Type) is as follows:</p> <table><tr><td>Carpenter</td><td>15.38%</td></tr><tr><td>Electrician</td><td>32.31% (includes Linemen)</td></tr><tr><td>Maint. Mech</td><td>13.85%</td></tr><tr><td>Painter</td><td>10.77%</td></tr><tr><td>Pipefitter</td><td>23.08%</td></tr><tr><td>Metal Worker</td><td>4.62%</td></tr></table> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>	Carpenter	15.38%	Electrician	32.31% (includes Linemen)	Maint. Mech	13.85%	Painter	10.77%	Pipefitter	23.08%	Metal Worker	4.62%
Carpenter	15.38%												
Electrician	32.31% (includes Linemen)												
Maint. Mech	13.85%												
Painter	10.77%												
Pipefitter	23.08%												
Metal Worker	4.62%												

WBS No: 1EFB12
Activity ID: 1EFB0470

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	209.00	Hours
Factors	235	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.78	Hours
Factors	255	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.37	Hours
Factors	78	hours					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	302.38	Hours
Factors	340	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	288.15	Hours
Factors	324	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	337.06	Hours
Factors	379	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.12	Hours
Factors	26	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	116.50	Hours
Factors	131	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	238.34	Hours
Factors	268	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	92.49	Hours
Factors	104	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	480.24	Hours
Factors	540	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.59	Hours
Factors	85	h					0.88934 [SYS 061400] .88934200 - Svstem		
	750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	205.44	Hours
Factors	231	h					0.88934 [SYS 061400] .88934200 - Svstem		
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	40.028.63	Dollars
Factors	1.015	-- FY00 Escalation --	44344.1	d			0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB12
Activity ID: 1EFB0470

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.325.14	Dollars
Factors	1.015	-- FY00 Escalation --	1468	Dollars				

0.88934 [SYS 061400] .88934200 - Ssystem

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$269.11 average in this cluster

Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074

Revised Unit - \$247.31

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	278.36	Hours

Factors 313 h

0.88934 [SYS 061400] .88934200 - Ssystem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	289.04	Hours
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Factors 325 h

0.88934 [SYS 061400] .88934200 - Ssystem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	32.02	Hours
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Factors 36 h

0.88934 [SYS 061400] .88934200 - Ssystem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4.447.62	Dollars
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Factors 1.015 -- FY00 Escalation -- 4927.12 h

0.88934 [SYS 061400] .88934200 - Ssystem

A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	147.14	Dollars
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Factors 163 dollars 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - Ssystem

Line Item 5 - th568101B10 - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year
Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC
Breakdown of Cost Data:
Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.
Units - Hours
Unit Cost - \$48381
Unit Cost Adjustment factor - None
Revised Unit Cost - None
Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EFB12
Activity ID: 1EFB0470

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 5a - SSOC Support to Bldg 705

BOE	Estimators Experience - One Year Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC Breakdown of Cost Data: Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only. Units - Hours Unit Cost - \$48381 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - None This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	364.41	Hours

Factors 409.75 H

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	6.033.62	Dollars
	Factors 6033.62 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	3.980.67	Dollars

Factors 6033.62 Dollars

Factors 3980.67 Dollars

Activity ID: 1EFB0480 Description: 750 Cluster Landlord Functions. FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	3.083	3.083	64.650	41.354	0	106.004	22.822	128.826
3	Preventive maintenance	1.00	each	HC	599	599	12.731	4.595	0	17.326	4.494	21.820
5 - tH568102B10	SSOC Support to Bldg 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.473	13.312
5a	SSOC Support to Bldg 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.473	13.312
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	26.427	26.427	0	26.427
Total for Activity 1EFB0480:						4.412	97.059	45.949	26.427	169.435	34.262	203.697

Line Item 1 - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. •Approximately 142 corrective/routine maintenance work actions are expected. Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$1872.34 average for this cluster Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074 Revised Unit - \$1720.68
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WBS No: 1EFB12
Activity ID: 1EFB0480

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.78	Hours
Factors	255 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	209.00	Hours
Factors	235 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	288.15	Hours
Factors	324 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	337.06	Hours
Factors	379 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.37	Hours
Factors	78 hours							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	302.38	Hours
Factors	340 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	116.50	Hours
Factors	131 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.12	Hours
Factors	26 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	238.34	Hours
Factors	268 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.59	Hours
Factors	85 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	480.24	Hours
Factors	540 h							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB12
Activity ID: 1EFB0480

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	92.49	Hours
Factors	104	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	205.44	Hours
Factors	231	h						
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	40.028.63	Dollars
Factors	44344.1	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1.325.14	Dollars
Factors	1468	Dollars	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$269.11 average in this cluster
Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074
Revised Unit - \$247.31
Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	278.36	Hours
Factors	313	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	289.04	Hours
Factors	325	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	32.02	Hours
Factors	36	h	0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.447.62	Dollars
Factors	4927.12	h	1.015	-- FY00 Escalation --	0.88934 [SYS 061400] .88934200 - Svstem				
A5T	TAXES		0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	147.14	Dollars
Factors	163	dollars	1.015	-- FY00 Escalation --	0.88934 [SYS 061400] .88934200 - Svstem				

WBS No: 1EFB12
Activity ID: 1EFB0480

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Line Item 5 - tH568102B10 - SSOC Support to Bldg 705

BOE	Estimators Experience - One Year Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC Breakdown of Cost Data: Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only. Units - Hours Unit Cost - \$48.81 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - None This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	751 OVERTIME BASE & PRE.	L030 UTILITY WORKER	KE10H Indust/Site Srvs Steelworkers	Linear	364.41	Hours
Factors	409.75	H				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 5a - SSOC Support to Bldg 705

BOE	Estimators Experience - One Year Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC Breakdown of Cost Data: Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only. Units - Hours Unit Cost - \$48.81 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - None This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	751 OVERTIME BASE & PRE.	L030 UTILITY WORKER	KE10H Indust/Site Srvs Steelworkers	Linear	364.41	Hours
Factors	409.75	H				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE										
Resources	<i>Cost Element</i>			<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	18.143.02	Dollars
	<i>Factors</i>		18143.0 Dollars							
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	8.284.08	Dollars
	<i>Factors</i>		8284.08 Dollars							

Activity ID: 1EFB0490 Description: 750 Cluster Landlord Functions. FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	3.083	3.083	64.650	41.354	0	106.004	22.369	128.373
3	Preventive maintenance	1.00	each	HC	599	599	12.731	4.595	0	17.326	4.405	21.731
5 - tH568103B10	SSOC Support to Bldg 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.404	13.243
5a	SSOC Support to Bldg 705	1.00	each	EE	364	364	9.839	0	0	9.839	3.404	13.243
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	48.837	48.837	0	48.837
Total for Activity 1EFB0490:						4.412	97.059	45.949	48.837	191.845	33.583	225.427

Line Item 1 - Corrective maintenance

BOE	Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, Negotiated and was awarded the Site maintenance contract. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98(This data was derived from the MMS system), and the proposed value was applied to FY99. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the											
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WBS No: 1EFB12
Activity ID: 1EFB0490

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

MMS.

•Approximately 142 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Ad hoc queries from the MMS and 002A and spending variance reports from the P&I Reporting system for Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$1872.34 average for this cluster
Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074
Revised Unit - \$1720.68
Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	209.00	Hours
Factors	235	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	226.78	Hours
Factors	255	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	337.06	Hours
Factors	379	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	69.37	Hours
Factors	78	hours				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	302.38	Hours
Factors	340	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	288.15	Hours
Factors	324	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	139.63	Hours
Factors	157	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.12	Hours
Factors	26	h				0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	116.50	Hours
Factors	131	h				0.88934	ISYS 0614001.88934200 - Svstem	

WBS No: 1EFB12
Activity ID: 1EFB0490

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	139.63	Hours
Factors	157	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	238.34	Hours
Factors	268	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	92.49	Hours
Factors	104	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	75.59	Hours
Factors	85	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	480.24	Hours
Factors	540	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	205.44	Hours
Factors	231	h						
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	40.028.63	Dollars
Factors	44344.1	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,325.14	Dollars
Factors	1468	Dollars	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 160 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$269.11 average in this cluster
Unit Adjustment factor - This activity adjusted down by 8.1% per FCP 1999-8074
Revised Unit - \$247.31
Basis for adjustment - FY 99 FCP 1999-8074 representing productivity improvements over the project lifecycle.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	278.36	Hours
Factors	313	h						
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB12
Activity ID: 1EFB0490

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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WBS Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	289.04	Hours
Factors	325	h						
						0.88934 [SYS 061400]	.88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	32.02	Hours
Factors	36	h						
						0.88934 [SYS 061400]	.88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.447.62	Dollars
Factors	4927.12	h	1.015	-- FY00 Escalation --				
						0.88934 [SYS 061400]	.88934200 - Svstem	
A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	147.14	Dollars
Factors	163	dollars	1.015	-- FY00 Escalation --				
						0.88934 [SYS 061400]	.88934200 - Svstem	

Line Item 5 - th568103B10 - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year
Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC
Breakdown of Cost Data:
Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.
Units - Hours
Unit Cost - \$48.81
Unit Cost Adjustment factor - None
Revised Unit Cost - none
Basis for adjustment - None
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	S100S	SSOC Salaried	Linear	364.41	Hours
Factors	409.75	H						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 5a - SSOC Support to Bldg 705

BOE

Estimators Experience - One Year
Experience Item Desc - Custodial & SOE support to Bldg 705 from SSOC
Breakdown of Cost Data:
Item - Labor for one Fiscal Year, performing organization indicated services would be supplied on an over time basis only.
Units - Hours
Unit Cost - \$48.81
Unit Cost Adjustment factor - None
Revised Unit Cost - none
Basis for adjustment - None
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
751	OVERTIME BASE & PRE.	L030	UTILITY WORKER	S100S	SSOC Salaried	Linear	364.41	Hours
Factors	409.75	H						

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	35.294.75	Dollars
Factors	35294.8	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13.541.89	Dollars
Factors	13541.9	Dollars						

WBS No: 1EFB14 Title: 566 Cluster Landlord
Activity ID: 1EFB0500 Description: 566 Cluster Landlord Functions, FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1EFB14
Activity ID: 1EFB0500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

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1	Corrective maintenance	1.00	each	HC	306	306	6.592	1.821	0	8.413	3.217	11.630
3	Preventive maintenance	1.00	each	HC	52	52	1.130	202	0	1.332	551	1.883
Total for Activity 1EFB0500:						357	7.722	2.024	0	9.746	3.768	13.514

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 28 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$789.78 average for this cluster

Unit Cost Adjustment factor - none

Revised Unit Cost - \$789.78 average for this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	21.39	Hours
Factors	42.72 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	19.75	Hours
Factors	39.44 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	13.17	Hours
Factors	26.29 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	28.50	Hours
Factors	56.92 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	27.24	Hours
Factors	54.4 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	31.81	Hours
Factors	63.53 h	0.3612 May 2000 Earned Value Factor		1.38645 [SYS 061300] 1.386448 - Target				

WBS No: 1EFB14
Activity ID: 1EFB0500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.59	Hours
Factors	13.15	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.19	Hours
Factors	4.38	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	13.17	Hours
Factors	26.29	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	10.97	Hours
Factors	21.91	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	13.17	Hours
Factors	26.29	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.49	Hours
Factors	44.91	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.78	Hours
Factors	17.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.13	Hours
Factors	14.24	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.36	Hours
Factors	90.57	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	19.38	Hours
Factors	38.7	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.66	Hours
Factors	1.31	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.07	Hours
Factors	2.14	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.99	Hours
Factors	1.97	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.66	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.36	Hours
Factors	2.72	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	3.18	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.43	Hours
Factors	2.85	H	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB14
Activity ID: 1EFB0500

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Project Baseline Devl
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Activity Filter *

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.66	Hours
Factors	1.31	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.55	Hours
Factors	1.1	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.22	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.66	Hours
Factors	1.31	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.13	Hours
Factors	2.25	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.88	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.27	Hours
Factors	4.53	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.36	Hours
Factors	0.71	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.94	H	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]	1.386448	- Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,757.65	Dollars
Factors	1.015	-- FY00 Escalation --	3457.93	d	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	63.54	Dollars
Factors	1.015	-- FY00 Escalation --	125	dollars	0.3612	May 2000	Earned Value Factor	1.38645 [SYS 061300]
							1.386448	- Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 35 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$102.74 average in this cluster
Unit Cost Adjustment factor - none
Revised Unit Cost - \$102.74 average in this cluster
Basis for adjustment - none

WBS No: 1EFB14
Activity ID: 1EFB0500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	26.33	Hours
Factors	52.58 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	19.75	Hours
Factors	39.44 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.01	Hours
Factors	6.02 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.32	Hours
Factors	2.63 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.99	Hours
Factors	1.97 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.15	Hours
Factors	0.3 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448	- Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	195.29	Dollars
Factors	1.015 -- FY00 Escalation --		384.21 d	0.3612	May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target
A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	7.12	Dollars
Factors	1.015 -- FY00 Escalation --		14 Dollars	0.3612	May 2000 Earned Value Factor			
						1.38645 [SYS 061300]	1.386448	- Target

Activity ID: 1EFB0505 Description: 566 Cluster Landlord Functions, FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	543	543	11.707	3.234	0	14.941	5.584	20.526
3	Preventive maintenance	1.00	each	HC	92	92	2.006	359	0	2.366	957	3.323
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.262	1.262	0	1.262
Total for Activity 1EFB0505:						634	13.713	3.594	1.262	18.569	6.541	25.110

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 28 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages

WBS No: 1EFB14
Activity ID: 1EFB0505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Unit Cost - \$789.78 average for this cluster
Unit Cost Adjustment factor - none
Revised Unit Cost - \$789.78 average for this cluster
Basis for adjustment - none

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.99	Hours
Factors 42.72 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.08	Hours
Factors 39.44 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.38	Hours
Factors 26.29 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.50	Hours
Factors 63.53 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.69	Hours
Factors 13.15 H								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.38	Hours
Factors 54.4 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.62	Hours
Factors 56.92 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.49	Hours
Factors 21.91 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.90	Hours
Factors 4.38 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.38	Hours
Factors 26.29 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.38	Hours
Factors 26.29 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.94	Hours
Factors 44.91 h								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.66	Hours
Factors 14.24 h								
0.88934 [SYS 061400] .88934200 - System								

WBS No: 1EFB14
Activity ID: 1EFB0505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.55	Hours
Factors	90.57	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.59	Hours
Factors	17.53	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	34.42	Hours
Factors	38.7	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.75	Hours
Factors	1.97	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.17	Hours
Factors	1.31	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.90	Hours
Factors	2.14	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.53	Hours
Factors	2.85	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.83	Hours
Factors	3.18	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors	0.66	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42	Hours
Factors	2.72	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.98	Hours
Factors	1.1	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.22	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.17	Hours
Factors	1.31	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.17	Hours
Factors	1.31	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.00	Hours
Factors	2.25	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88	H						
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.63	Hours
Factors	0.71	H						
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB14
Activity ID: 1EFB0505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	3,121.41	Dollars
Factors	3457.93	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - Svstem		
A5T	TAXES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	112.84	Dollars
Factors	1.015 -- FY00 Escalation --		125 Dollars					
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 35 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$102.74 average in this cluster
Unit Cost Adjustment factor - none
Revised Unit Cost - \$102.74 average in this cluster
Basis for adjustment - none

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	46.76	Hours
Factors	52.58	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.08	Hours
Factors	39.44	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.35	Hours
Factors	6.02	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.34	Hours
Factors	2.63	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.75	Hours
Factors	1.97	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB14
Activity ID: 1EFB0505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.27	Hours
Factors	0.3 h							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	346.82	Dollars
Factors	1.015 -- FY00 Escalation --		384.21 d					
A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	12.64	Dollars
Factors	1.015 -- FY00 Escalation --		14 Dollars					
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	760.10	Dollars
	Factors 760.103 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	501.48	Dollars
	Factors 501.477 Dollars								

Activity ID: 1EFB0510 Description: 566 Cluster Landlord Functions, FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	543	543	11.707	3.234	0	14.941	4.133	19.074
3	Preventive maintenance	1.00	each	HC	92	92	2.006	356	0	2.362	708	3.070
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3.301	3.301	0	3.301
Total for Activity 1EFB0510:						634	13.713	3.590	3.301	20.605	4.841	25.445

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 28 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$789.78 average for this cluster
Unit Cost Adjustment factor - none
Revised Unit Cost - \$789.78 average for this cluster
Basis for adjustment - none

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EFB14
Activity ID: 1EFB0510

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.38	Hours
Factors	26.29	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.99	Hours
Factors	42.72	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.08	Hours
Factors	39.44	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.69	Hours
Factors	13.15	H						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	48.38	Hours
Factors	54.4	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.50	Hours
Factors	63.53	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	50.62	Hours
Factors	56.92	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	23.38	Hours
Factors	26.29	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	19.49	Hours
Factors	21.91	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.90	Hours
Factors	4.38	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	39.94	Hours
Factors	44.91	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.38	Hours
Factors	26.29	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.59	Hours
Factors	17.53	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.55	Hours
Factors	90.57	H						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	12.66	Hours
Factors	14.24	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	34.42	Hours
Factors	38.7	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.17	Hours
Factors	1.31	H						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB14
Activity ID: 1EFB0510

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.90	Hours
Factors	2.14	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.75	Hours
Factors	1.97	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors	0.66	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.83	Hours
Factors	3.18	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.53	Hours
Factors	2.85	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.42	Hours
Factors	2.72	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.98	Hours
Factors	1.1	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.22	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.17	Hours
Factors	1.31	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.00	Hours
Factors	2.25	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.17	Hours
Factors	1.31	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.03	Hours
Factors	4.53	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.63	Hours
Factors	0.71	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.78	Hours
Factors	0.88	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94	H						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.121.41	Dollars
Factors	1.015	-- FY00 Escalation --	3457.93 d					
						0.88934 [SYS 061400] .88934200 - Svstem		
A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	112.84	Dollars
Factors	1.015	-- FY00 Escalation --	125 Dollars					
						0.88934 [SYS 061400] .88934200 - System		

Line Item 3 - Preventive maintenance

BOE	Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to
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WBS No: 1EFB14
Activity ID: 1EFB0510

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corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 35 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$102.74 average in this cluster

Unit Cost Adjustment factor - none

Revised Unit Cost - \$102.74 average in this cluster

Basis for adjustment - none

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	46.76	Hours
Factors 52.58 h								
						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	35.08	Hours
Factors 39.44 h								
						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	5.35	Hours
Factors 6.02 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.34	Hours
Factors 2.63 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.75	Hours
Factors 1.97 h								
						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.27	Hours
Factors 0.3 h								
						0.88934 [SYS 061400] .88934200 - System		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	346.82	Dollars
Factors 1.015 -- FY00 Escalation -- 384.21 d								
						0.88934 [SYS 061400] .88934200 - System		
A5T	TAXES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	9.03	Dollars
Factors 1.015 -- FY00 Escalation -- 10 Dollars								
						0.88934 [SYS 061400] .88934200 - System		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2,266.39	Dollars
Factors 2266.39 Dollars								

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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.034.83	Dollars
Factors 1034.83 Dollars								

WBS No: 1EFB15 Title: Site Services Cluster Landlord
Activity ID: 1EFB0515 Description: Site Services Cluster Landlord Funtions. FY00 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	11	11	244	65	0	309	119	428
1a	Corrective maintenance	1.00	each	HC	506	506	10.921	2.912	0	13.833	5.329	19.162
1b	Corrective maintenance	0.65	each	HC	869	565	12.217	4.125	0	16.342	5.962	22.304
3	Preventive maintenance	1.00	each	HC	2	2	42	7	0	49	20	69
3a	Preventive maintenance	1.00	each	HC	85	85	1.872	324	0	2.195	913	3.109
3b	Preventive maintenance	0.65	each	HC	187	121	2.657	459	0	3.116	1.297	4.413
Total for Activity 1EFB0515:						1.291	27.952	7.892	0	35.844	13.641	49.485

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 1 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$818 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors 1.46 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target						
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.79	Hours
Factors 1.58 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target						
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.49	Hours
Factors 0.97 h 0.3612 May 2000 Earned Value Factor 1.38645 [SYS 061300] 1.386448 - Target						

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.06	Hours
Factors	2.11	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.01	Hours
Factors	2.01	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.18	Hours
Factors	2.35	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.25	Hours
Factors	0.49	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.08	Hours
Factors	0.16	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.41	Hours
Factors	0.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours
Factors	0.97	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours
Factors	0.97	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.83	Hours
Factors	1.66	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.68	Hours
Factors	3.35	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.33	Hours
Factors	0.65	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.27	Hours
Factors	0.53	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	1.43	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KD10H	776 Complex Steelworkers	Linear	0.03	Hours
Factors	0.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.08	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.07	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.05	Hours
Factors	0.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB15
Activity ID: 1EFB0515

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.02	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.11	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.04	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.05	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.08	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.03	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.03	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.17	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.07	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	64.97	Dollars
Factors	127.81	d	1.015	-- FY00 Escalation --	0.3612 May 2000 Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 44 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:

WBS No: 1EFB15
Activity ID: 1EFB0515

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*

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Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$832.64 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	32.72	Hours
Factors	65.33 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	35.44	Hours
Factors	70.77 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	21.81	Hours
Factors	43.55 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	52.70	Hours
Factors	105.24 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	47.25	Hours
Factors	94.36 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	45.13	Hours
Factors	90.12 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	10.91	Hours
Factors	21.78 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	3.64	Hours
Factors	7.26 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	18.17	Hours
Factors	36.29 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	21.81	Hours
Factors	43.55 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	21.81	Hours
Factors	43.55 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	37.26	Hours
Factors	74.4 h	0.3612	May 2000 Earned Value Factor					
						1.38645 [SYS 061300]	1.386448 - Target	

WBS No: 1EFB15
Activity ID: 1EFB0515

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter *
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.54	Hours
Factors	29.04	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	11.81	Hours
Factors	23.58	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	75.14	Hours
Factors	150.04	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	32.11	Hours
Factors	64.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.09	Hours
Factors	2.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.64	Hours
Factors	3.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.77	Hours
Factors	3.54	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.55	Hours
Factors	1.09	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.36	Hours
Factors	4.72	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.26	Hours
Factors	4.51	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.63	Hours
Factors	5.26	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.18	Hours
Factors	0.36	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.91	Hours
Factors	1.81	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.09	Hours
Factors	2.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.86	Hours
Factors	3.72	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.09	Hours
Factors	2.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.76	Hours
Factors	7.5	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB15
Activity ID: 1EFB0515

Rockv Flats Closure Project
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Project
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*

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.73	Hours
Factors	1.45	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.59	Hours
Factors	1.18	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.61	Hours
Factors	3.21	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2.911.76	Dollars
Factors	1.015	-- FY00 Escalation --	5728.46	d	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

Approximately 2 corrective/routine maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$40007.5 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%
Pipefitter	23.08%
Metal Worker	4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.63	Hours
Factors	115.08	h	0.3612	May 2000 Earned Value Factor					
							1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	54.43	Hours
Factors	108.69	h	0.3612	May 2000 Earned Value Factor					
							1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.63	Hours
Factors	95.12	h	0.3612	May 2000 Earned Value Factor					
							1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB15
Activity ID: 1EFB0515

Rockv Flats Closure Project
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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.45	Hours
Factors	106.74	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	37.49	Hours
Factors	74.86	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.59	Hours
Factors	51.1	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	23.82	Hours
Factors	47.56	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	39.70	Hours
Factors	79.27	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	7.94	Hours
Factors	15.85	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	47.63	Hours
Factors	95.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	81.37	Hours
Factors	162.49	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	47.63	Hours
Factors	95.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	31.76	Hours
Factors	63.42	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	164.11	Hours
Factors	327.7	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.80	Hours
Factors	51.51	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	70.13	Hours
Factors	140.04	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.38	Hours
Factors	4.76	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.87	Hours
Factors	7.73	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.57	Hours
Factors	7.13	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.16	Hours
Factors	10.31	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target

WBS No: 1EFB15
Activity ID: 1EFB0515

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	5.75	Hours
Factors	11.49	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.19	Hours
Factors	2.38	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.93	Hours
Factors	9.84	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KD10H	776 Complex Steelworkers	Linear	1.98	Hours
Factors	3.96	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.38	Hours
Factors	4.76	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.40	Hours
Factors	0.79	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.07	Hours
Factors	8.12	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.38	Hours
Factors	4.76	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Factors	2.58	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.20	Hours
Factors	16.38	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.59	Hours
Factors	3.17	h	0.3612	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	3.51	Hours
Factors	7	h	0.36128	May 2000	Earned Value Factor			
						1.38645	[SYS 061300]	1.386448 - Target
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	6,346.69	Dollars
Factors	1.015	-- FY00 Escalation --	12486.2	d	0.3612	May 2000	Earned Value Factor	
						1.38645	[SYS 061300]	1.386448 - Target

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:

WBS No: 1EFB15
Activity ID: 1EFB0515

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$133 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.97	Hours
Factors	1.94 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.73	Hours
Factors	1.46 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.11	Hours
Factors	0.22 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.05	Hours
Factors	0.1 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.04	Hours
Factors	0.07 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.01	Hours
Factors	0.01 h		0.3612	May 2000 Earned Value Factor				
						1.38645 [SYS 061300]	1.386448 - Target	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	7.22	Dollars
Factors	14.2 d		1.015	-- FY00 Escalation --	0.3612	May 2000 Earned Value Factor		
						1.38645 [SYS 061300]	1.386448 - Target	

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.
•Approximately 1 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$5957 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

WBS No: 1EFB15
Activity ID: 1EFB0515

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Activity Filter *

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The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	43.62	Hours
Factors	87.11 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	32.72	Hours
Factors	65.33 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.99	Hours
Factors	9.97 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.18	Hours
Factors	4.36 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.64	Hours
Factors	3.27 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.25	Hours
Factors	0.5 h	0.3612	May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	323.53	Dollars
Factors	1.015 -- FY00 Escalation --	636.5 d	0.3612 May 2000 Earned Value Factor	1.38645 [SYS 061300] 1.386448 - Target				

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 15 preventative maintenance work actions are expected.

The BOE write up represents annual FY00 budget, but this BOE cost estimate represents .3612 Earned Value Factor from May 22, 2000, to September 30, 2000. 82 remaining days due to change in Kaiser Hill contract with DOE.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$867.27 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%

WBS No: 1EFB15
Activity ID: 1EFB0515

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	95.27	Hours
Factors	190.25	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	71.46	Hours
Factors	142.69	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	10.90	Hours
Factors	21.77	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.76	Hours
Factors	9.51	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	3.57	Hours
Factors	7.13	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.55	Hours
Factors	1.09	h	0.3612	May 2000 Earned Value Factor					
							1.38645 [SYS 061300] 1.386448 - Target		
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	706.63	Dollars
Factors	1390.19	d	1.015	-- FY00 Escalation --		0.3612	May 2000 Earned Value Factor		

Activity ID: 1EFB0520

Description: Site Services Cluster Landlord Funtions. FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	206	755
1a	Corrective maintenance	1.00	each	HC	899	899	19,375	5,171	0	24,546	9,242	33,788
1b	Corrective maintenance	0.65	each	HC	1,964	1,277	27,533	7,341	0	34,874	13,133	48,008
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	35	122
3a	Preventive maintenance	1.00	each	HC	152	152	3,324	575	0	3,899	1,586	5,484
3b	Preventive maintenance	0.65	each	HC	331	215	4,718	816	0	5,534	2,251	7,785
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5,075	5,075	0	5,075
Total for Activity 1EFB0520:						2,566	55,458	14,031	5,075	74,564	26,453	101,017

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.30	Hours
Factors	1.46	h						
0.88934 [SYS 061400] .88934200 - Svstem							1.41	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.41	Hours
Factors	1.58	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.86	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
0.88934 [SYS 061400] .88934200 - Svstem							1.88	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.88	Hours
Factors	2.11	h						
0.88934 [SYS 061400] .88934200 - Svstem							1.79	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.79	Hours
Factors	2.01	h						
0.88934 [SYS 061400] .88934200 - Svstem							2.09	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.09	Hours
Factors	2.35	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.14	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.14	Hours
Factors	0.16	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.86	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.72	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.72	Hours
Factors	0.81	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.86	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
0.88934 [SYS 061400] .88934200 - Svstem							1.48	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.48	Hours
Factors	1.66	h						
0.88934 [SYS 061400] .88934200 - Svstem							2.98	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.98	Hours
Factors	3.35	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.58	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.58	Hours
Factors	0.65	h						
0.88934 [SYS 061400] .88934200 - Svstem							0.47	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.47	Hours
Factors	0.53	h						
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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*

Starts In FY *

750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.27	Hours
Factors	1.43							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.49							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.04							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
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*

Starts In FY *

751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02 h							
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	115.37	Dollars
Factors	127.81 d	1.015	-- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors	65.33	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.94	Hours
Factors	70.77	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.15	Hours
Factors	90.12	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	83.92	Hours
Factors	94.36	h							
							0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	93.59	Hours
Factors	105.24	h							
							0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	32.27	Hours
Factors	36.29							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.46	Hours
Factors	7.26							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	66.17	Hours
Factors	74.4							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.83	Hours
Factors	29.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.97	Hours
Factors	23.58							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.44	Hours
Factors	150.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	64.12							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	19.37	Hours
Factors	21.78							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.15	Hours
Factors	3.54							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.01	Hours
Factors	4.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.20	Hours
Factors	4.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.61	Hours
Factors	1.81							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.32	Hours
Factors	0.36	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KD10H	776 Complex Steelworkers	Linear	3.31	Hours
Factors	3.72	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Factors	1.45	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	1.18	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.67	Hours
Factors	7.5	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.21	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09	h						
						0.88934 [SYS 061400] .88934200 - System		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,170.98	Dollars
Factors	5728.46	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System		

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 2 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$40007.5 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter	15.38%
Electrician	32.31% (includes Linemen)
Maint. Mech	13.85%
Painter	10.77%

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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*

Starts In FY *

Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	126.90	Hours
Factors	142.69	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	84.59	Hours
Factors	95.12	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	137.47	Hours
Factors	154.58	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	42.30	Hours
Factors	47.56	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	183.29	Hours
Factors	206.1	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	175.06	Hours
Factors	196.84	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	204.42	Hours
Factors	229.86	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	70.50	Hours
Factors	79.27	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	14.10	Hours
Factors	15.85	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	84.59	Hours
Factors	95.12	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	84.59	Hours
Factors	95.12	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	144.51	Hours
Factors	162.49	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	56.40	Hours
Factors	63.42	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	45.81	Hours
Factors	51.51	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	291.44	Hours
Factors	327.7	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	124.54	Hours
Factors	140.04	h						
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB15
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Rockv Flats Closure Project
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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.34	Hours
Factors	7.13	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	7.73	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.75	Hours
Factors	9.84	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.17	Hours
Factors	10.31	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.22	Hours
Factors	11.49	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.70	Hours
Factors	0.79	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.52	Hours
Factors	3.96	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.22	Hours
Factors	8.12	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.57	Hours
Factors	16.38	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.82	Hours
Factors	3.17	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.29	Hours
Factors	2.58	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.23	Hours
Factors	7	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	11,294.10	Dollars
Factors	12511.7	d	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System		

Line Item 3 - Preventive maintenance

BOE	Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to
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WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
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Activity Filter *

Starts In FY *

corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$133 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.73	Hours

Factors 1.94 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	1.30	Hours
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Factors 1.46 h

0.88934 ISYS 0614001.88934200 - Svstem

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.20	Hours
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Factors 0.22 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.09	Hours
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Factors 0.1 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.06	Hours
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Factors 0.07 h

0.88934 ISYS 0614001.88934200 - Svstem

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.01	Hours
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Factors 0.01 h

0.88934 ISYS 0614001.88934200 - Svstem

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	12.82	Dollars
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Factors 14.2 d

1.015 -- FY00 Escalation --

0.88934 ISYS 0614001.88934200 - Svstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$5957 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.47	Hours
Factors 87.11 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors 65.33 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.87	Hours
Factors 9.97 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.88	Hours
Factors 4.36 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors 3.27 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors 0.5 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	574.56	Dollars
Factors 636.5 d 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible.
The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 15 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$867.27 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

WBS No: 1EFB15
Activity ID: 1EFB0520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.20	Hours
Factors 190.25 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	126.90	Hours
Factors 142.69 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.36	Hours
Factors 21.77 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.46	Hours
Factors 9.51 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.34	Hours
Factors 7.13 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors 1.09 h								
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1,254.90	Dollars
Factors 1390.19 d 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3,057.89	Dollars
Factors 3057.89 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2,017.44	Dollars
Factors 2017.44 Dollars								

Activity ID: 1EFB0525 Description: Site Services Cluster Landlord Funtions. FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	153	701
1a	Corrective maintenance	1.00	each	HC	899	899	19,375	5,171	0	24,546	6,839	31,386
1b	Corrective maintenance	0.65	each	HC	1,964	1,277	27,533	7,341	0	34,874	9,719	44,594
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	26	113
3a	Preventive maintenance	1.00	each	HC	152	152	3,324	575	0	3,899	1,173	5,072
3b	Preventive maintenance	0.65	each	HC	331	215	4,718	816	0	5,534	1,666	7,200
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13,278	13,278	0	13,278
Total for Activity 1EFB0525:						2,566	55,458	14,031	13,278	82,766	19,577	102,342

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099.

WBS No: 1EFB15
Activity ID: 1EFB0525

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter *
Baseline Devl
1EFB

Starts In FY *

The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.30	Hours

Factors 1.46 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.41	Hours
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Factors 1.58 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours
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Factors 0.97 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.88	Hours
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Factors 2.11 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.79	Hours
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Factors 2.01 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	2.09	Hours
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Factors 2.35 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.14	Hours
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Factors 0.16 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours
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Factors 0.97 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.72	Hours
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Factors 0.81 h

0.88934 ISYS 0614001 .88934200 - Svstem

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours
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Factors 0.97 h

0.88934 ISYS 0614001 .88934200 - Svstem

WBS No: 1EFB15
Activity ID: 1EFB0525

Rockv Flats Closure Project
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Starts In FY *

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.58	Hours
Factors	0.65	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.47	Hours
Factors	0.53	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.27	Hours
Factors	1.43	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.49	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.04	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB15
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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	115.37	Dollars
Factors	127.81							
1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors	65.33							
0.88934 [SYS 061400] .88934200 - Svsstem								

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750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.94	Hours
Factors	70.77							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	93.59	Hours
Factors	105.24							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	83.92	Hours
Factors	94.36							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	80.15	Hours
Factors	90.12							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	6.46	Hours
Factors	7.26							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	32.27	Hours
Factors	36.29							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	66.17	Hours
Factors	74.4							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.97	Hours
Factors	23.58							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.83	Hours
Factors	29.04							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.44	Hours
Factors	150.04							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	64.12							
						0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	19.37	Hours
Factors	21.78							
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27							
						0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.15	Hours
Factors	3.54							
						0.88934	[SYS 061400] .88934200 - Svstem	

WBS No: 1EFB15
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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.01	Hours
Factors	4.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.20	Hours
Factors	4.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.32	Hours
Factors	0.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.61	Hours
Factors	1.81							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.31	Hours
Factors	3.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Factors	1.45							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	1.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.67	Hours
Factors	7.5							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.21							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	5,170.98	Dollars
Factors	5728.46	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1b - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>·Approximately 2 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance</p>
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WBS No: 1EFB15
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Rockv Flats Closure Project
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Starts In FY *

Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$40007.5 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	84.59	Hours
Factors	95.12		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	126.90	Hours
Factors	142.69		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	137.47	Hours
Factors	154.58		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	183.29	Hours
Factors	206.1		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	42.30	Hours
Factors	47.56		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	175.06	Hours
Factors	196.84		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	204.42	Hours
Factors	229.86		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	84.59	Hours
Factors	95.12		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	70.50	Hours
Factors	79.27		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	14.10	Hours
Factors	15.85		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	84.59	Hours
Factors	95.12		h					
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	144.51	Hours
Factors	162.49		h					
						0.88934	ISYS 0614001.88934200 - Svstem	

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.40	Hours
Factors	63.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.81	Hours
Factors	51.51							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	291.44	Hours
Factors	327.7							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	124.54	Hours
Factors	140.04							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.34	Hours
Factors	7.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	7.73							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.17	Hours
Factors	10.31							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.22	Hours
Factors	11.49							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.75	Hours
Factors	9.84							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.70	Hours
Factors	0.79							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.52	Hours
Factors	3.96							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.22	Hours
Factors	8.12							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.82	Hours
Factors	3.17							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB15
Activity ID: 1EFB0525

Rockv Flats Closure Project
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Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.57	Hours
Factors	16.38	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.29	Hours
Factors	2.58	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.23	Hours
Factors	7	h						
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	11.294.10	Dollars
Factors	1.015	-- FY00 Escalation --	12511.7	d				
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$133 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94	h	0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours
Factors	1.46	h	0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.22	h	0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1	h	0.88934 [SYS 061400] .88934200 - Svsstem						
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h	0.88934 [SYS 061400] .88934200 - Svsstem						

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.01	Hours
Factors	0.01	h						
						0.88934	[SYS 061400] .88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	12.82	Dollars
Factors	14.2	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400] .88934200 - Svstem	

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$5957 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00% (includes Linemen)
Maint. Mech	37.50%
Pipefitter	12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill	Department			Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	77.47	Hours
Factors	87.11	h							
							0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	58.10	Hours
Factors	65.33	h							
							0.88934	[SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.87	Hours
Factors	9.97	h							
							0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.88	Hours
Factors	4.36	h							
							0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.91	Hours
Factors	3.27	h							
							0.88934	[SYS 061400] .88934200 - Svstem	
751	OVERTIME BASE & PRE.		C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.44	Hours
Factors	0.5	h							
							0.88934	[SYS 061400] .88934200 - Svstem	
A5C	SUPPLIES		0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	574.56	Dollars
Factors	636.5	d	1.015 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - Svstem	

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to

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corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 15 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98

Item Desc - Fiscal Year Preventive Maintenance

Breakdown of Data:

Item - Preventive maintenance

Units - Work Packages

Unit Cost - \$867.27 average in this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)

Maint. Mech 37.50%

Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	169.20	Hours
Factors	190.25 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	126.90	Hours	
Factors	142.69 h		0.88934 ISYS 0614001.88934200 - Svstem						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	19.36	Hours	
Factors	21.77 h		0.88934 ISYS 0614001.88934200 - Svstem						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.46	Hours	
Factors	9.51 h		0.88934 ISYS 0614001.88934200 - Svstem						
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	6.34	Hours	
Factors	7.13 h		0.88934 ISYS 0614001.88934200 - Svstem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.97	Hours	
Factors	1.09 h		0.88934 ISYS 0614001.88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,254.90	Dollars	
Factors	1390.19 d		0.88934 ISYS 0614001.88934200 - Svstem						
			1.015	-- FY00 Escalation --					
									0.88934 ISYS 0614001.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9,115.50	Dollars
Factors		9115.50	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4,162.13	Dollars
Factors		4162.13	Dollars					

Activity ID: 1EFB0530 Description: Site Services Cluster Landlord Funtions. FY03

Cost Risk 2 Schedule Risk 1

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Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	150	698
1a	Corrective maintenance	1.00	each	HC	899	899	19,375	5,171	0	24,546	6,704	31,250
1b	Corrective maintenance	0.65	each	HC	1,964	1,277	27,533	7,341	0	34,874	9,527	44,401
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	26	112
3a	Preventive maintenance	1.00	each	HC	152	152	3,324	575	0	3,899	1,150	5,049
3b	Preventive maintenance	0.65	each	HC	331	215	4,718	816	0	5,534	1,633	7,166
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	24,524	24,524	0	24,524
Total for Activity 1EFB0530:						2,566	55,458	14,031	24,524	94,012	19,188	113,200

Line Item 1 - Corrective maintenance

BOE	<p>Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.</p> <p>•Approximately 1 corrective/routine maintenance work actions are expected.</p> <p>Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98 Item Desc - Fiscal Year Corrective Maintenance Breakdown of Data: Item - Corrective maintenance Units - Work Packages Unit Cost - \$818 average for this cluster Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99 Basis for adjustment - None. The percentage of maintenance effort (labor Type) is as follows:</p> <p>Carpenter 15.38% Electrician 30.77% (includes Linemen) Maint. Mech 13.85% Painter 10.77% Pipefitter 23.08% Metal Worker 4.62% Stationary Operating Engineer 1.54%</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	1.30	Hours
Factors	1.46 h					
				0.88934 [SYS 061400] .88934200 - Ssystem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	1.41	Hours
Factors	1.58 h					
				0.88934 [SYS 061400] .88934200 - Ssystem		
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	0.86	Hours
Factors	0.97 h					
				0.88934 [SYS 061400] .88934200 - Ssystem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	2.09	Hours
Factors	2.35 h					
				0.88934 [SYS 061400] .88934200 - Ssystem		
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	1.88	Hours
Factors	2.11 h					
				0.88934 [SYS 061400] .88934200 - Ssystem		

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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.16							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.58	Hours
Factors	0.65							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.47	Hours
Factors	0.53							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.27	Hours
Factors	1.43							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.49							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
						0.88934 [SYS 061400] .88934200 - Svstem		

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.04							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	115.37	Dollars
Factors	127.81	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98
Item Desc - Fiscal Year Corrective Maintenance
Breakdown of Data:
Item - Corrective maintenance
Units - Work Packages
Unit Cost - \$832.64 average for this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)

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Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55	h						
0.88934 [SYS 061400] .88934200 - Svstem							58.10	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	62.94	Hours
Factors	65.33	h						
0.88934 [SYS 061400] .88934200 - Svstem							93.59	Hours
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	83.92	Hours
Factors	70.77	h						
0.88934 [SYS 061400] .88934200 - Svstem							80.15	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.46	Hours
Factors	105.24	h						
0.88934 [SYS 061400] .88934200 - Svstem							32.27	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	94.36	h						
0.88934 [SYS 061400] .88934200 - Svstem							66.17	Hours
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	90.12	h						
0.88934 [SYS 061400] .88934200 - Svstem							20.97	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	25.83	Hours
Factors	7.26	h						
0.88934 [SYS 061400] .88934200 - Svstem							133.44	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	36.29	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	43.55	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	74.4	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	43.55	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	23.58	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	29.04	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	150.04	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	64.12	h						
0.88934 [SYS 061400] .88934200 - Svstem							57.02	Hours

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750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	19.37	Hours
Factors	21.78							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.15	Hours
Factors	3.54							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.01	Hours
Factors	4.51							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.20	Hours
Factors	4.72							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.61	Hours
Factors	1.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.32	Hours
Factors	0.36							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.31	Hours
Factors	3.72							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Factors	1.45							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.67	Hours
Factors	7.5							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	1.18							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.21							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09							
						0.88934 [SYS 061400] .88934200 - Svstem		

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A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,170.98	Dollars
Factors	5728.46 d	1.015	-- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 1b - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

·Approximately 2 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$40007.5 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064

Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 32.31% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	137.47	Hours

Factors 154.58 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	84.59	Hours
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Factors 95.12 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	126.90	Hours
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Factors 142.69 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	183.29	Hours
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Factors 206.1 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	42.30	Hours
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Factors 47.56 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	175.06	Hours
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Factors 196.84 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	204.42	Hours
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Factors 229.86 h

0.88934 [SYS 061400] .88934200 - Svsstem

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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	84.59	Hours
Factors	95.12							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	70.50	Hours
Factors	79.27							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	14.10	Hours
Factors	15.85							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	144.51	Hours
Factors	162.49							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	84.59	Hours
Factors	95.12							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.40	Hours
Factors	63.42							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	45.81	Hours
Factors	51.51							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	291.44	Hours
Factors	327.7							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	124.54	Hours
Factors	140.04							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.34	Hours
Factors	7.13							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.87	Hours
Factors	7.73							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.12	Hours
Factors	2.38							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.17	Hours
Factors	10.31							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.75	Hours
Factors	9.84							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.22	Hours
Factors	11.49							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.70	Hours
Factors	0.79							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	3.52	Hours
Factors	3.96							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.23	Hours
Factors	4.76							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.22	Hours
Factors	8.12							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KD10H	776 Complex Steelworkers	Linear	2.82	Hours
Factors	3.17							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.57	Hours
Factors	16.38							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.29	Hours
Factors	2.58							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	6.23	Hours
Factors	7							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	11,294.10	Dollars
Factors	12511.7	d	1.015	-- FY00 Escalation --				
0.88934 [SYS 061400] .88934200 - System								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$133 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician	50.00% (includes Linemen)
Maint. Mech	37.50%
Pipefitter	12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours
Factors	1.46							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.22							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	12.82	Dollars
Factors	14.2	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$5957 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.47	Hours
Factors	87.11							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors	65.33							
0.88934 [SYS 061400] .88934200 - Svstem								

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750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.87	Hours
Factors	9.97	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.88	Hours
Factors	4.36	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5	h						
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	574.56	Dollars
Factors	636.5	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 3b - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 15 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$867.27 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 on are based on executing the same scope as FY99, but include a reduction to 65% of the FY 99 budget per FCP 1999-8064
Basis for adjustment - FCP 1999-8064 funding efficiency return.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	169.20	Hours
Factors	190.25	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	126.90	Hours
Factors	142.69	h						
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	19.36	Hours
Factors	21.77	h						
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.46	Hours
Factors	9.51	h						
0.88934 [SYS 061400] .88934200 - Svstem								

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	6.34	Hours
Factors 7.13 h		0.88934 [SYS 061400] .88934200 - Svsystem						
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.97	Hours
Factors 1.09 h		0.88934 [SYS 061400] .88934200 - Svsystem						
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	1,254.90	Dollars
Factors 1.015 -- FY00 Escalation --		1390.19 d						
		0.88934 [SYS 061400] .88934200 - Svsystem						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	17.723.59	Dollars
	Factors 17723.6 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6.800.19	Dollars
Factors 6800.19 Dollars									

Activity ID: 1EFB0535 Description: Site Services Cluster Landlord Funtions, FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	1.00	each	HC	20	20	433	115	0	548	122	670
1a	Corrective maintenance	1.00	each	HC	899	899	19,375	5,171	0	24,546	5,464	30,010
3	Preventive maintenance	1.00	each	HC	3	3	74	13	0	87	21	108
3a	Preventive maintenance	1.00	each	HC	152	152	3,324	575	0	3,899	937	4,836
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5.077	5.077	0	5.077
Total for Activity 1EFB0535:						1,074	23,206	5,874	5.077	34,157	6,544	40,701

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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Activity ID: 1EFB0535

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Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours
Factors	1.46							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.41	Hours
Factors	1.58							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.88	Hours
Factors	2.11							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.09	Hours
Factors	2.35							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.16							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.58	Hours
Factors	0.65							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.47	Hours
Factors	0.53							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.27	Hours
Factors	1.43							
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.49							
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB15
Activity ID: 1EFB0535

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751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.04							
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	115.37	Dollars
Factors	127.81							
			1.015	-- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value

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Activity ID: 1EFB0535

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Starts In FY *

was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	38.73	Hours

Factors 43.55 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	58.10	Hours
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Factors 65.33 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	62.94	Hours
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Factors 70.77 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	80.15	Hours
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Factors 90.12 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	93.59	Hours
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Factors 105.24 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	83.92	Hours
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Factors 94.36 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	32.27	Hours
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Factors 36.29 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	38.73	Hours
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Factors 43.55 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	6.46	Hours
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Factors 7.26 h

0.88934 [SYS 061400] .88934200 - Svsstem

750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	66.17	Hours
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Factors 74.4 h

0.88934 [SYS 061400] .88934200 - Svsstem

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750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	38.73	Hours
Factors	43.55							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.97	Hours
Factors	23.58							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.44	Hours
Factors	150.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.83	Hours
Factors	29.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	64.12							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	19.37	Hours
Factors	21.78							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.15	Hours
Factors	3.54							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.01	Hours
Factors	4.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.20	Hours
Factors	4.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.61	Hours
Factors	1.81							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.32	Hours
Factors	0.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.31	Hours
Factors	3.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								

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751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Factors	1.45	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	1.18	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.67	Hours
Factors	7.5	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.21	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	5.170.98	Dollars
Factors	1.015	-- FY00 Escalation --	5728.46	d				
						0.88934	ISYS 0614001.88934200 - Svstem	

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$133 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours
Factors	1.46	h						
						0.88934	ISYS 0614001.88934200 - Svstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.22	h						
						0.88934	ISYS 0614001.88934200 - Svstem	

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.09	Hours
Factors	0.1	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.01	Hours
Factors	0.01	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	12.82	Dollars
Factors	14.2	d	1.015 -- FY00 Escalation --					
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$5957 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	77.47	Hours
Factors	87.11	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	58.10	Hours
Factors	65.33	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	8.87	Hours
Factors	9.97	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.88	Hours
Factors	4.36	h						
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	2.91	Hours
Factors	3.27	h						
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EFB15
Activity ID: 1EFB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	0.44	Hours
Factors	0.5	h						

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	574.56	Dollars
Factors	1.015	-- FY00 Escalation --	636.5	d				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1.656.45	Dollars
Factors	1656.45	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	3.420.48	Dollars
Factors	3420.48	Dollars			

Activity ID: 1EXXB0535 Description: Site Services Cluster Landlord Funtions. End

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Corrective maintenance	0.87	each	HC	20	18	378	101	0	479	132	610
1a	Corrective maintenance	0.87	each	HC	899	785	16.922	4.516	0	21.438	5.889	27.327
3	Preventive maintenance	0.87	each	HC	3	3	65	11	0	76	23	98
3a	Preventive maintenance	0.87	each	HC	152	132	2.903	502	0	3.405	1.010	4.415
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	17.315	17.315	0	17.315
Total for Activity 1EXXB0535:						938	20.267	5.130	17.315	42.712	7.053	49.765

Line Item 1 - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$818 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	1.30	Hours
Factors	1.46	h			

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EFB15
Activity ID: 1EXXB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.41	Hours
Factors	1.58	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.88	Hours
Factors	2.11	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.79	Hours
Factors	2.01	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.09	Hours
Factors	2.35	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.14	Hours
Factors	0.16	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.72	Hours
Factors	0.81	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.86	Hours
Factors	0.97	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.48	Hours
Factors	1.66	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.98	Hours
Factors	3.35	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.58	Hours
Factors	0.65	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.47	Hours
Factors	0.53	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	1.27	Hours
Factors	1.43	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.49	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08	h						
						0.88934 [SYS 061400] .88934200 - Svstem		
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
						0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EFB15
Activity ID: 1EXXB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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Baseline Devl
1EFB
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Starts In FY *

751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.11	Hours
Factors	0.12							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.10	Hours
Factors	0.11							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.04							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.04	Hours
Factors	0.05							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.07	Hours
Factors	0.08							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.03	Hours
Factors	0.03							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.15	Hours
Factors	0.17							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.02	Hours
Factors	0.02							
0.88934 [SYS 061400] .88934200 - Svstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	115.37	Dollars
Factors	127.81	d	1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item 1a - Corrective maintenance

BOE

Corrective Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are not readily predictable, as such a model was generated and used to estimate the budgetary requirements of this and all RFCSS managed clusters. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

WBS No: 1EFB15
Activity ID: 1EXXB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

Approximately 44 corrective/routine maintenance work actions are expected.

Historical/Model Data Source - MMS Reporting System and P&I SVAR for FY98

Item Desc - Fiscal Year Corrective Maintenance

Breakdown of Data:

Item - Corrective maintenance

Units - Work Packages

Unit Cost - \$832.64 average for this cluster

Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99

Basis for adjustment - None.

The percentage of maintenance effort (labor Type) is as follows:

Carpenter 15.38%
Electrician 30.77% (includes Linemen)
Maint. Mech 13.85%
Painter 10.77%
Pipefitter 23.08%
Metal Worker 4.62%
Stationary Operating Engineer 1.54%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	38.73	Hours
Factors	43.55	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	58.10	Hours
Factors	65.33	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	62.94	Hours
Factors	70.77	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	80.15	Hours
Factors	90.12	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	93.59	Hours
Factors	105.24	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	83.92	Hours
Factors	94.36	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	32.27	Hours
Factors	36.29	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	38.73	Hours
Factors	43.55	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Linear	6.46	Hours
Factors	7.26	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	66.17	Hours
Factors	74.4	h	0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE		C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	38.73	Hours
Factors	43.55	h	0.88934 [SYS 061400] .88934200 - Svstem						

WBS No: 1EFB15
Activity ID: 1EXXB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB

Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.97	Hours
Factors	23.58							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	133.44	Hours
Factors	150.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	25.83	Hours
Factors	29.04							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	57.02	Hours
Factors	64.12							
0.88934 [SYS 061400] .88934200 - Svstem								
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	19.37	Hours
Factors	21.78							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.15	Hours
Factors	3.54							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.01	Hours
Factors	4.51							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.68	Hours
Factors	5.26							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.20	Hours
Factors	4.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.61	Hours
Factors	1.81							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.32	Hours
Factors	0.36							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.31	Hours
Factors	3.72							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.94	Hours
Factors	2.18							
0.88934 [SYS 061400] .88934200 - Svstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.29	Hours
Factors	1.45							
0.88934 [SYS 061400] .88934200 - Svstem								

WBS No: 1EFB15
Activity ID: 1EXXXB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EFB
Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.05	Hours
Factors	1.18							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.67	Hours
Factors	7.5							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.85	Hours
Factors	3.21							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	0.97	Hours
Factors	1.09							
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,170.98	Dollars
Factors	1.015	-- FY00 Escalation --	5728.46	d				
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item 3 - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS.

•Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$133 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.73	Hours
Factors	1.94							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	1.30	Hours
Factors	1.46							
0.88934 [SYS 061400] .88934200 - Svsstem								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.20	Hours
Factors	0.22							
0.88934 [SYS 061400] .88934200 - Svsstem								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.09	Hours
Factors	0.1							
0.88934 [SYS 061400] .88934200 - Svsstem								

WBS No: 1EFB15
Activity ID: 1EXXXB0535

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
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Starts In FY *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	0.06	Hours
Factors	0.07	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.01	Hours
Factors	0.01	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	12.82	Dollars
Factors	14.2	d	1.015	-- FY00 Escalation --				
						0.88934	[SYS 061400]	.88934200 - Ssystem

Line Item 3a - Preventive maintenance

BOE

Preventive Maintenance activities and or related processes necessary to support, plan, operate, and maintain infrastructure assets are modeled similar to corrective maintenance. The model is based on analysis of over 4,000 PMOs in the areas for which RFCSS is responsible. The basis of estimate for the resources necessary to perform maintenance activities is: A review of the actual costs accrued during FY 98, RFCSS planned maintenance performance, backlog, and projected work load. These items were the basis from which RFCSS proposed, negotiated, and was awarded the Site maintenance contract KH800099. The proposal value was then modeled to each cluster based on the number of maintenance actions associated with that cluster in FY98, and the proposed value was applied. The percentage of maintenance effort (labor Type) required for each maintenance action is based on the average number of hours required for each labor type for all of the maintenance actions in the RFCSS controlled clusters. This data was taken from the MMS. Approximately 1 preventative maintenance work actions are expected.

Data Source - MMS and P&I Reporting System SVAR for FY98
Item Desc - Fiscal Year Preventive Maintenance
Breakdown of Data:
Item - Preventive maintenance
Units - Work Packages
Unit Cost - \$5957 average in this cluster
Unit Adjustment factor - FY99 is used as a base year. FY00 through 05 are based on executing the same scope as FY99
Basis for adjustment - None.

The percentage of maintenance effort (labor Type) required is as follows:

Electrician 50.00% (includes Linemen)
Maint. Mech 37.50%
Pipefitter 12.50%

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	77.47	Hours
Factors	87.11	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	58.10	Hours
Factors	65.33	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.87	Hours
Factors	9.97	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.88	Hours
Factors	4.36	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	2.91	Hours
Factors	3.27	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.44	Hours
Factors	0.5	h						
						0.88934	[SYS 061400]	.88934200 - Ssystem

WBS No: 1EFB15
Activity ID: 1EXXXB0535

Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1EFB
*

Starts In FY *

A5C	SUPPLIES	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	574.56	Dollars
Factors	1.015	-- FY00 Escalation --	636.5	d				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	12.288.05	Dollars

Factors 12288.1 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	5.027.05	Dollars
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Factors 5027.05 Dollars

Report Totals:

Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
253.741	5,651.200	1,723.665	1,532.494	8,907.358	2,230.307	11,137.665